

Curriculum



Preschool

- Colors
- Numbers
- Letters
- Shapes
- Spatial Reasoning
- Animals
- Social Issues
- Weather
- People
- General Vocabulary
- Math Readiness

Kindergarten

- Language Arts
- Math
- Science
- Social Studies
- Health
- Manners
- Character Development
- Interpersonal Relationships

First Grade

- Language Arts
- Math
- Science
- Social Studies
- Health
- Manners
- Character Development
- Interpersonal Relationships
- Health & Wellness

Second Grade

- Language Arts
- Math
- Science
- Social Studies
- Health
- Manners
- Character Development
- Interpersonal Relationships
- Health & Wellness

Third Grade

- Language Arts
- Math
- Science
- Social Studies
- Health
- Manners
- Character Development
- Interpersonal Relationships
- Health & Wellness

Fourth Grade

- Language Arts
- Math
- Science
- Social Studies
- Health
- Manners
- Character Development
- Interpersonal Relationships
- Health & Wellness
- Study Skills

Fifth Grade

- Language Arts
- Math
- Science
- Social Studies
- Health
- Manners
- Character Development
- Interpersonal Relationships
- Health & Wellness
- Study Skills

Sixth Grade

- Language Arts
- Math
- Science
- Social Studies
- Health
- Character Development
- Interpersonal Relationships
- Health & Wellness
- Study Skills

Seventh Grade

- Language Arts
- Math
- Science
- Social Studies
- Health
- Character Development
- Critical Thinking
- Interpersonal Relationships
- Cultural Literacy
- Health & Wellness
- Home Skills
- Study Skills

Eighth Grade

- Language Arts
- Algebra I
- Science
- Social Studies
- Health
- Character Development
- Critical Thinking
- Interpersonal Relationships
- Cultural Literacy
- Home Skills
- Study Skills

Ninth Grade

- Language Arts
- Geometry
- Biology/Life Science
- Social Studies
- Health
- Home Economics
- Sociology
- Character Development
- Critical Thinking
- Interpersonal Relationships
- Cultural Literacy
- Health & Wellness
- Home Skills
- Personal Finances
- Parenting Skills
- Study Skills
- Survey of Careers
- Entrepreneurship

Tenth Grade

- Algebra II
- Earth Science
- Social Studies
- Health
- Spanish I
- French I
- German I
- Sociology
- Character Development
- Critical Thinking
- Interpersonal Relationships
- Cultural Literacy
- Health & Wellness
- Home Skills
- Personal Finances
- Parenting Skills
- Study Skills
- Career Skills
- Business Management
- Survey of Careers
- Entrepreneurship

Eleventh Grade

- Language Arts
- Precalculus
- Chemistry
- Social Studies
- Health
- Spanish I
- French I
- German I
- Sociology
- Character Development
- Health & Wellness
- Home Skills
- Personal Finances
- Parenting Skills
- Study Skills
- Career Skills
- Business Management
- Survey of Careers
- Entrepreneurship

Twelfth Grade

- Calculus
- Probability and Statistics
- Physics
- Economics
- American Democracy
- Health

Twelfth Grade (continued)

- Sociology
- Character Development
- Health & Wellness
- Personal Finances
- Parenting Skills
- Study Skills
- Career Skills
- Business Management
- Survey of Careers
- Entrepreneurship

A Note About Our Curriculum

The educational standards for the state of California form the basis for most of our curriculum. For more information about what is included in each subtopic, and for ideas on how to supplement the flashcards you find here, please visit [California's Department of Education](#) website.

In particular, the [content standards](#) and the [curriculum frameworks](#) will help teachers, students, and facilitators gain insight into why we have organized our curriculum as we have, and what our flashcards teach.

Preschool

Free World U

Preschool Colors

Basic Colors

- Colors Found in Nature
- Colors Found in Toys
- Colors Found in Vehicles
- Colors Found in Foods
- Colors Found in Clothes
- Colors Found in Animals

Concept of Blending

- Primary Colors
- Mixing Primary Colors

Preschool Numbers

Recognition

- Numbers 0 to 10
- Numbers by Tens

How Many?

- Counting Foods
- Counting Vehicles
- Counting Toys
- Counting Animals

More / Less

- Which is More / Less Foods
- Which is More / Less Vehicles
- Which is More / Less Toys
- Which is More / Less Animals

Patterns

- Food Patterns

- Shape Patterns
- Color Patterns
- Letter Patterns
- Toy Patterns
- Animal Patterns
- Number Patterns

Preschool Letters

Capital / Lowercase

- Matching With Capital Letters
- Matching With Lower Case Letters

Starts With -----

- Foods
- Vehicles
- Toys
- Animals
- Colors

Preschool Shapes

Recognition

- Colored Shapes

Count the Sides

- Food Shapes
- Vehicle Shapes
- Toy Shapes
- Animal Shapes
- Colors and Shapes

Shapes in the World

- Food Shapes
- Vehicle Shapes

- Toy Shapes
- Animal Shapes

Preschool Spatial Reasoning

Taller / Shorter

- Foods
- Toys
- Vehicles
- Animals
- Shapes

Thicker / Thinner

- Foods
- Toys
- Vehicles
- Animals
- Shapes

Inside / Outside

- Foods
- Toys
- Vehicles
- Animals
- Shapes

Above / Below

- Foods
- Toys
- Vehicles
- Animals
- Shapes

Preschool Animals

Ocean

- Animals
- Characteristics
- Babies
- Food

River

- Animals
- Characteristics
- Babies
- Food

Farm

- Animals
- Characteristics
- Babies
- Food

Forest

- Animals
- Characteristics
- Babies
- Food

House

- Animals
- Characteristics
- Babies
- Food

Sky

- Animals

- Characteristics
- Babies
- Food

Insect / Spiders

- Recognizing
- Characteristics
- Babies
- Food

Preschool Social Issues

Feelings

- Feelings

Friendship / Sharing

- Friendship
- Sharing

Safe / Unsafe

- Safe and Unsafe

Being Polite

- Being Polite

Following Directions

- Following Directions

Preschool Weather

Recognition

- Weather Sounds
- Weather Seasons
- Weather Pictures
- Attire
- Accessories

Preschool People

Recognition

- Emergency Workers
- Service People

Matching With Uniform / Accessories

- Emergency Workers
- Service People

Family

- Family

Preschool General Vocabulary

This is A -----

- Food
- Toys
- Vehicles
- Animals
- Objects
- Shapes

Which is the -----?

- Food
- Toys
- Vehicles
- Animals
- Objects
- Shapes

Preschool Math Readiness

Operations

- Simple Addition

- Simple Subtraction

Time

- Day and Night

Statistics

- Sorting Objects
- Comparing Objects
- Which Doesn't Belong?
- Object Graphs

Kindergarten

Free World U

Kindergarten Language Arts

Reading

- Letter Sounds
Student practices orally making sounds for all consonants and short vowels
- First Words
What is a word? Show pictures and ask: fox or box? ball or fall?
- Sight Words
Explains that some words don't follow the rules and can't be sounded out; we read simple sight word, and student chooses it from a list of three
- Count the Syllables
What is a syllable?; count the number of syllables in words that we read aloud
- Count the Sounds
Words are made up of letter sounds; how many sounds do you hear in "cat"?
- Count the Words
Track the words in a printed sentence that is read aloud; how many words in the sentence? Which word is "skip"?
- Rhyming
Change one letter to create a rhyming word
- Colors
Reading color words: black, brown, red, blue, etc.

Reading Literature

- Books
Identifying front cover, back cover, title page
- Is it Real or Fantasy?
Distinguishing between real stories and fantasy stories
- Retelling
Identifies characters, setting, and important events in short stories read aloud
- Nursery Rhymes
Covers simple nursery rhymes and touches on themes and characters in simple way
- Sayings
The early bird gets the worm. Don't cry over spilt milk. Keep your fingers crossed.
- Identify Types of Writing
Books, poems, newspapers, signs, labels

Phonics and Spelling

- Beginning Sounds
Consonants

- Ending Sounds
Consonants
- Long and Short Vowels
All vowels
- Spell CVC Words
Common, regular three-letter words
- Word Family Fun
Adding, changing, or deleting one letter to make a new word: sat to fat, bug to rug, red to bed, etc.

Writing

- Letters and Their Sounds
Includes all letters
- Capital and Lowercase Letters
Includes all letters
- Beginning and Ending Sounds
We read a three-letter word and ask student to indicate the first or last letter; Ex. We say "but" and ask student to identify the first letter
- Print Upper and Lower Case Letters
- Print Words

Vocabulary

- Vocabulary
Gives descriptions of common objects and ask what is being described
- Sorting
Lists and pictures of common items are presented; student is asked what belongs or does not belong

Comprehension

- Listening Practice
We read short stories and ask child questions. Who? When? Where?
- Following Directions
We read simple directions of one or two steps and ask students to respond
- Describing
Why do we use describing words? What are describing words? Ask students to describe the size, color, or shape of various objects

Oral Language

- Recite a Rhyme
Recite short poems, rhymes, and songs
- Tell About It
Relate an experience or creative story in a logical sequence

- Speaking
Students speak in coherent sentences

Kindergarten Math

Number Sense

- Comparing Sets
Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other
- Manipulating Objects
Count, recognize, represent, name, and order a number of objects (up to 30)
- Larger and Smaller Numbers
Know that the larger numbers describe sets with more objects in them than the smaller numbers have
- Using Concrete Objects
Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10)
- Estimating
Recognize when an estimate is reasonable

Algebra and Functions

- Identify, Sort and Classify
Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red)

Measurement and Geometry

- Comparing to a Reference
Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more)
- Time Concepts
Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar)
- Days of the Week
Name the days of the week
- Common Times
Identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock; bedtime is 8 o'clock at night)
- Common Geometric Objects
Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone)

- Comparing by Common Attributes
Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners)

Statistics, Data Analysis, and Probability

- Investigation Process
Pose information questions; collect data; and record the results using objects, pictures, and picture graphs
- Patterns
Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors

Mathematical Reasoning

- Determining Methods
Determine the approach, materials, and strategies to be used
- Using Tools and Strategies
Use tools and strategies, such as manipulatives or sketches, to model problems
- Explaining Reasoning
Explain the reasoning used with concrete objects and/ or pictorial representations
- Computing and Checking
Make precise calculations and check the validity of the results in the context of the problem

Kindergarten Science

Physical Sciences

- Describing Objects
Students know objects can be described in terms of the materials they are made of (e.g., clay, cloth, paper) and their physical properties (e.g., color, size, shape, weight, texture, flexibility, attraction to magnets, floating, sinking)
- Forms of Water
Students know water can be a liquid or a solid and can be made to change back and forth from one form to the other
- Evaporation
Students know water left in an open container evaporates (goes into the air) but water in a closed container does not

Life Sciences

- Comparing Plants and Animals
Students know how to observe and describe similarities and differences in the appearance and behavior of plants and animals (e.g., seed-bearing plants, birds, fish, insects)
- Life Science in Stories
Students know stories sometimes give plants and animals attributes they do not really have

- Structures of Plants and Animals
Students know how to identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs)

Earth Sciences

- Landforms
Students know characteristics of mountains, rivers, oceans, valleys, deserts, and local landforms
- Weather
Students know changes in weather occur from day to day and across seasons, affecting Earth and its inhabitants
- Natural Resources
Students know how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved

Investigation and Experimentation

- Using the Five Senses
Observe common objects by using the five senses
- Describing Properties
Describe the properties of common objects
- Describing Position
Describe the relative position of objects by using one reference (e.g., above or below)
- Comparing and Sorting Objects
Compare and sort common objects by one physical attribute (e.g., color, shape, texture, size, weight)
- Communicating Observations
Communicate observations orally and through drawings

Kindergarten Social Studies

Being a Good Citizen

- Following Rules
Such as sharing and taking turns; know the consequences of breaking them
- Being A Good Citizen
- Character
Examples of honesty, courage, determination, individual responsibility; patriotism in American and world history from stories and folklore
- Beliefs
Beliefs and related behaviors of characters in stories from times past; understand the consequences of the characters' actions

National and State Symbols

- National Symbols
e.g., flag, the bald eagle, the Statue of Liberty
- State Symbols
Flags, etc.

Jobs That People Do

- Jobs
At the school, in the local community, and from historical accounts

Locations of Places and Environments

- Locations of Objects
Using the terms near/far, left/right, and behind/in front
- Land and Water on Maps and Globes
Locate general areas referenced in historical legends and stories
- Map and Traffic Symbols
e.g., those for land, water, roads, cities
- Maps and Models of Neighborhoods
Incorporating such structures as police and fire stations, airports, banks, hospitals, supermarkets, harbors, schools, homes, places of worship, and transportation lines
- Maps and Models of Schools
Layout, environs, and the jobs people do there

Time Order

- Using a Calendar
Placing days, weeks, and months in proper order

Events and People of Other Times

- Commemorative Holidays
Purposes, the people and events honored, the human struggles that were the basis for the events, e.g., Thanksgiving, Independence Day, Washington's and Lincoln's Birthdays, Martin Luther King Jr. Day, Memorial Day, Labor Day, Columbus Day, Veterans Day
- How People Lived in Earlier Times
And how their lives would be different today, e.g., getting water from a well, growing food, making clothing, having fun, forming organizations, living by rules and laws
- George Washington
Stories and triumphs
- Abraham Lincoln
Stories and triumphs
- Betsy Ross
Stories and triumphs

- Dr. Martin Luther King Jr.
Stories and triumphs
- Benjamin Franklin
Stories and triumphs
- Harriet Tubman
Stories and triumphs
- Pocahontas
Stories and triumphs
- George Washington Carver
Stories and triumphs
- Booker T. Washington
Stories and triumphs
- Daniel Boone
Stories and triumphs

Kindergarten Health

Signs / Symptoms of Illness

- Fever
- Rash
- Cough
- Congestion

Encouraging Positive Health Choices

- Eating Practices
- Cleanliness
- Safety Practices

Positive vs. Negative Behaviors

- Waiting Your Turn
- Pushing
- Honesty
- Lying

Refusal Skills

- Healthy Behavior Skills
- Just Say No

- Stranger Danger

Kindergarten Manners

Introduction to Manners

- What are manners?

Manners are the unofficial behaviors that demonstrate a person is proper, polite and refined.

- Why are manners important?

Manners set a standard for human behavior; the definition of “good manners” changes with time, geographical location, occasion and other factors. Your manners affect the way others think of you and influence the way you are treated.

- Basic manners include:

- Table manners
- Please and thank you
- Waiting your turn
- No name calling
- Pleasant greetings
- Accepting compliments
- Cleaning up after yourself
- Good sportsmanship
- Opening doors for others
- Appropriate room entering/exiting
- Respecting differences
- Introducing yourself
- Shaking hands
- Technology use
- Thank you notes
- Personal space

Kindergarten Character Development I

Character Study

- Defining Character
- Learning the Traits

Monkey See Monkey Do

- Recognizing Character in History
- Recognizing Character in Others
- Recognizing Character in Fairy Tales

Roleplay

- Doing the Right Thing

Kindergarten Character Development II

Character Study

- What is Character?

Know the definition of character: “who we are” – the personal traits that mark us as individuals.

- Who has character?

Understand that character is something everyone has – regardless of age, position, gender and personality.

- What is “Good” Character?

The meaning of the statement “He has character” –usually indicating “good” character.

Understand that “good” character means doing the right thing *because* it is the right thing to do – regardless of who knows you are doing it or the possible outcomes and benefits it will bring.

Learning the Traits

- Fairness

Know the definition of fairness: free from self-interest, prejudice or favoritism

- Honesty

Know the definition of honesty: a refusal to lie, steal or deceive

- Creativity

Know the definition of creativity: approaching a need, task or idea from a new perspective

Character in Action

- Recognizing character through behavior

Identifying examples of key character traits:

Fairness: Has anybody ever tricked you? How did it make you feel?

Honesty: What would you do if you saw someone stealing?

Creativity: Have you ever thought of a new way to solve a problem or complete a project?

Kindergarten Interpersonal Relationships

Introduction to Relationships

- What is a relationship?

A relationship is a state of emotional connection between two people.

- Why are relationships important?

Relationships can do the following:

- Build family and security
- Provide a sense of identity and belonging
- Lead to happiness and fulfillment
- Contribute to personal growth
- Aid in physical and emotional well being

Kindergarten Health & Wellness

Introduction to Health

- What is health?

Health is the state of complete physical, mental, and social well being; health is not simply the absence of disease.

- What does it mean to be “healthy”?

To be healthy, one must be well in total body including physically, emotionally and spiritually; healthy individuals also share an ongoing desire for better health and wish to maintain a healthy lifestyle.

- What are the primary components of good physical health?
 - Exercise
 - Diet & Nutrition
 - Sleep
 - Healthcare
 - Hygiene
 - Safety

First Grade

Free World U

Grade One Language Arts

Reading Skills

- Listening to Language
We read a three- or four-letter word and student chooses correct word from list
- Sight Words
We read sight word and student chooses correct word from list
- Inflectional Forms
We read a word such as “looking” and student selects this word from list that includes “looked, looking, looks.”; other target words: jump, see, sleep, play, etc.
- Reading Fluently

Reading Literature

- Sayings
Getting cold feet. Got off on the wrong foot. Got up on the wrong side of the bed.
- Prose
Learning about story elements; identifying characters, plot, setting
- Mother Goose
Covers Mother Goose nursery rhymes and introduces students to the idea of a body of work in literature
- Fables
Characteristics of fables; examples of well-known fables
- Retelling
What happened in the beginning, in the middle, at the end of a story
- Answering Questions
Who, what, when, where, why, how questions
- Books
What does an author do? An illustrator?

Phonics and Spelling

- Word Family Fun
Adding, changing, or deleting one letter to make a new word. i.e. cat to rat, that to hat, ice to dice, boy to box
- CVC Words
Tag, map, red, pig, pin, mom, wet, hen, bun, etc.
- CVCE Words
What happens when we put an “e” on the end of a word? Does the “e” make a sound? kite, cave, rake, note, wide, joke, etc.
- Vowel Diagraphs
- Beginning and Ending Sounds
Fill in the missing letter based on the sound of the word

- Initial Consonant Blends
What is a blend? Simplest examples: drop, flag, skip, glad, grass, sled, trash, etc.
- Compound Words
What is a compound word? Simplest examples: snowman, windmill, inside, hilltop, etc.
- Contractions
What is a contraction? Simplest examples: isn't, aren't, can't, won't, I'm, we're, etc.

Writing

- Capital Letters
First word in sentence, names, proper nouns
- Plural Nouns
Simple examples, adding "s" to regular nouns
- Sentences
Parts of a sentence: capital letter, punctuation, makes sense
- Three Types of Sentences
Telling sentences, exclamations, and questions
- Putting Sentences in Order
Sentence is mixed up and student puts into correct order
- Using Descriptive Words
Using sensory words to describe how something looks, feels, tastes, smells, sounds to help reader "see"
- Paragraphs
Choosing a focus
- Identify Problems in Sentences
Words not separated by proper space, letters illegible, sentences that don't stay on the lines, words missing, etc.
- Writing Practice
Student demonstrates he can properly write all letters of the alphabet, short words, and sentences
- Write Brief Narratives
Fictional, autobiographical, describing an experience

Vocabulary

- Categorizing
Which word doesn't belong: cat, dog, bear, and shoe, etc.; use color words, shapes, foods, etc.
- Predictions
What will happen next?; using "signpost" words and context to make predictions

Comprehension

- Reading Practice
We read short story and ask student to answer simple questions from what they've heard
- Asking Questions
How to get information or ask clarification; when is it okay to ask questions?
- Following Directions
Simple, two-step directions – giving them and following them
- Sequence
Is this paragraph in the right order?

Oral Language

- Introduction to Public Speaking
Speak clearly, speak loudly, stick to the point, don't fidget
- Recitation
Student recites short rhymes

Grade One Math

Number Sense

- Whole Numbers to 100
Count, read, and write whole numbers to 100
- Comparing and Ordering
Compare and order whole numbers to 100 by using the symbols for less than, equal to, or greater than (<, =, >)
- Equivalent Forms
Represent equivalent forms of the same number through the use of physical models, diagrams, and number expressions (to 20) (e.g., 8 may be represented as 4 + 4, 5 + 3, 2 + 2 + 2 + 2, 10 - 2, 11 - 3)
- Grouping
Count and group object in ones and tens (e.g., three groups of 10 and 4 equals 34, or 30 + 4)
- Coins
Identify and know the value of coins and show different combinations of coins that equal the same value
- Addition and Subtraction Facts to 20
Know the addition facts (sums to 20) and the corresponding subtraction facts and commit them to memory
- Using Inverse Relationships
Use the inverse relationship between addition and subtraction to solve problems
- More Than, Less Than
Identify one more than, one less than, 10 more than, and 10 less than a given number

- Skip Counting
Count by 2s, 5s, and 10s to 100
- Meaning of Addition and Subtraction
Show the meaning of addition (putting together, increasing) and subtraction (taking away, comparing, finding the difference)
- Practicing Addition and Subtraction
Solve addition and subtraction problems with one-and two-digit numbers (e.g., $5 + 58 = \underline{\quad}$)
- Adding Three Numbers
Find the sum of three one-digit numbers
- Estimating and Comparison
Make reasonable estimates when comparing larger or smaller numbers

Algebra and Functions

- Number Sentences from Problem Situations
Write and solve number sentences from problem situations that express relationships involving addition and subtraction
- Math Symbols
Understand the meaning of the symbols $+$, $-$, $=$
- Creating Math Problem Situations
Create problem situations that might lead to given number sentences involving addition and subtraction

Measurement and Geometry

- Comparing Measurements
Compare the length, weight, and volume of two or more objects by using direct comparison or a nonstandard unit
- Telling Time
Tell time to the nearest half hour and relate time to events (e.g., before/after, shorter/longer)
- Working With Geometric Shapes
Identify, describe, and compare triangles, rectangles, squares, and circles, including the faces of three-dimensional objects
- Classifying Shapes by Attributes
Classify familiar plane and solid objects by common attributes, such as color, position, shape, size, roundness, or number of corners, and explain which attributes are being used for classification
- Directions About Location
Give and follow directions about location
- Location of Objects
Arrange and describe objects in space by proximity, position, and direction (e.g., near, far, below, above, up, down, behind, in front of, next to, left or right of)

Statistics, Data Analysis, and Probability

- **Sorting Objects and Data**
Sort objects and data by common attributes and describe the categories
- **Represent and Compare Data**
Represent and compare data (e.g., largest, smallest, most often, least often) by using pictures, bar graphs, tally charts, and picture graphs
- **Patterns**
Describe, extend, and explain ways to get to a next element in simple repeating patterns (e.g., rhythmic, numeric, color, and shape)

Mathematical Reasoning

- **Determining Methods**
Determine the approach, materials, and strategies to be used
- **Using Math Tools**
Use tools, such as manipulatives or sketches, to model problems
- **Explaining Why**
Explain the reasoning used and justify the procedures selected
- **Computing and Checking**
Make precise calculations and check the validity of the results from the context of the problem

Grade One Science

Physical Sciences

- **Material Forms**
Materials come in different forms (states), including solids, liquids, and gases and each has different properties
- **Properties of Substances**
The properties of substances can change when the substances are mixed, cooled, or heated

Life Sciences

- **Habitats and Adaptations**
Different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places
- **Energy and Water Needs**
Both plants and animals need water, animals need food, and plants need light
- **Animal Food and Shelter**
Animals eat plants or other animals for food, may use plants or even other animals for shelter and nesting; inferring what animals eat from the shapes of their teeth
- **Roots and Leaves**
Roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight

Earth Sciences

- Measuring and Recording Weather
How to use simple tools (e.g., thermometer, wind vane) to measure weather conditions and record changes from day to day and across the seasons
- Seasons and Weather
The weather changes from day to day but trends in temperature or of rain (or snow) tend to be predictable during a season
- Sunshine and Weather
The sun warms the land, air, and water

Investigation and Experimentation

- Demonstrating Understanding
Students should develop their own questions and perform investigations by being able to draw pictures that portray some features of the thing being described
- Recording Observations
Students should develop their own questions and perform investigations by knowing how to record observations and data with pictures, numbers, written statements and bar graphs
- Understanding Position
Students should develop their own questions and perform investigations by knowing how to describe the relative position of objects by using two references (e.g., above and next to, below and left of)
- Applying Knowledge
Students should develop their own questions and perform investigations by knowing how to make new observations when discrepancies exist between two descriptions of the same object or phenomenon

Grade One Social Studies

Rights and Responsibilities of Citizenship

- Direct Democracy and Representative Democracy
Everyone votes on the rules vs. an elected group of people makes the rules; examples of both systems in the classroom, school, and community
- Responsibility
The elements of fair play and good sportsmanship, respect for the rights and opinions of others, and respect for rules by which we live, including the meaning of the "Golden Rule"

Location of Places and People

- Locating on Maps and Globes
Their local community, California, the United States, the seven continents, and the four oceans
- Three-Dimensional Models
Information that can be derived for models, compared to information that can be derived from a picture of the same location

- Simple Maps
Cardinal directions and map symbols
- Location, Weather, and Physical Environment
How they affect the way people live, including the effects on their food, clothing, shelter, transportation, and recreation

Symbols and Traditions of the United States

- The Pledge of Allegiance and Songs that Express American Ideals
e.g., "America the Beautiful"
- National Holidays
Their significance and the heroism and achievements of the people associated with them
- American Symbols, Landmarks, and Essential Documents
Such as the flag, bald eagle, Statue of Liberty, U.S. Constitution, and Declaration of Independence, and the people and events associated with them

Life in Different Times and Places

- Changes and Consistencies Over Time
The structure of schools and communities in the past, transportation methods of earlier days
- Similarities and Differences of Earlier Generations
In such areas as work (inside and outside the home), dress, manners, stories, games, and festivals, drawing from biographies, oral histories, and folklore

Varied Backgrounds of American Citizens

- Recognizing Community Connections
Sharing principles, goals, and traditions despite their varied ancestry; the forms of diversity in their school and community; and the benefits and challenges of a diverse population
- American Indians and Immigrants
Ways they have helped define Californian and American culture
- Varied Cultures
Compare the beliefs, customs, ceremonies, traditions, and social practices, drawing from folklore

Basic Economic Concepts

- Concept of exchange
The use of money to purchase goods and services; the role of individual choice in a free-market economy
- Specialization
The specialized work that people do to manufacture, transport, and market goods and services and the contributions of those who work in the home

Grade One Health

Health Promotion and Illness Prevention

- Immunizations
- Hand Washing
- Brushing / Flossing Teeth
- Eating Practices
- Sleep
- Cleanliness

Parts of Body Systems and Functions

- Heart
- Lungs
- Eyes
- Ears
- Nose
- Mouth

Actions Influence the Functions of the Body

- Cleanliness
- Proper Diet
- Exercise

Healthy Choices Can Affect Health

- Not Brushing Teeth
- Smoking
- Improper Nutrition

Fear

- Mind – Body Connection
- Distrust
- Terror
- Paranoia

Bullying

- Name Calling
- Accepting Differences
- Verbal Bullying

Grade One Manners

Table Manners

- What are table manners?

Table manners are behaviors used during a meal; these behaviors are used for proper eating as well as to show courtesy to others you are dining with.

Basic table manners include:

- Eat with a fork unless the food is obviously intended to be eaten with fingers
- Sit up straight in your chair; do not hunch over your plate
- Rest your wrist or forearms on the table; never put your elbows on the table
- Do not put too much food in your mouth at one time
- Chew with your mouth closed; never talk with your mouth full
- Do not make rude comments about the food being served
- Show appreciation when food is served; say thank you
- Wait until everyone at the table is served before starting to eat
- Eat slowly; wait approximately five seconds after swallowing a bite to take another
- When eating dinner rolls, tear off a piece of the bread before buttering; do not eat it whole
- Do not reach over another person's plate to grab something; ask for the item to be passed to you
- Do not pick anything out of your teeth at the table; excuse yourself from the table to take care of it
- Always use a napkin to dab your mouth; keep the napkin in your lap when not in use
- Do not use napkins to wipe your face or blow your nose
- Always show your appreciation to the person who prepared or paid for the meal

Grade One Character Development I

Character Study

- What is Character?

Learning the Traits

- Empathy
- Fairness
- Creativity

Character in Action

- Recognizing Character

Role Play

- Doing the Right Thing

Grade One Character Development II

Character Study

- What is Reputation?

Know the definition of reputation: "who others *think* you are" – the general perception of a person by the public.

Understand the difference between character and reputation. Consider Abraham Lincoln's quote: "Perhaps a man's character is like a tree, and his reputation like its shadow; the shadow is what we think of it; the tree is the real thing."

Learning the Traits

- Empathy

Know the definition of empathy: the ability to share another person's emotions and feelings.

- Compassion

Know the definition of compassion: investing whatever is necessary to heal the hurts of others.

- Gentleness

Know the definition of gentleness: having and showing a kind consideration or tender nature.

Character in Action

- Recognizing character through behavior

Identifying examples of key character traits:

Empathy: If you saw someone knock over a glass of milk by accident, how would you feel? How have you been treated in making similar mistakes?

Compassion: How did the mice help Cinderella when her stepfamily was forcing her to do all of their chores?

Gentleness: How do you treat a baby? Why is it important to be extra careful?

Grade One Interpersonal Relationships

Types of Relationships

- Family – a group of people affiliated by biology or place of residence
- Sibling – people who share at least one parent
- Friendship – a connection between two people based on mutual trust, respect and admiration
- Peer – a connection based on similar traits (age, status, interests, location, etc.)
- Romantic – a connection between a male and female based on intimacy and commitment
- Co-Worker – a connection between people who share a place of work
- Husband/Wife – male and female participants in a marriage (civil union)
- Parent/Child – a biological connection based on reproduction and/or or upbringing

Grade One Health & Wellness

Exercise

- What is exercise?

Exercise is any bodily activity that enhances or maintains overall fitness and health; for optimal health, individuals should get 30 minutes of daily exercise.

Types of exercise include:

- Walking
- Running

- Dancing
- Swimming
- Sports/Games
- Benefits of regular exercise include:
 - Healthy weight
 - Strong muscles
 - Flexibility
 - Better sleep
 - Longer lifespan
 - Disease prevention
 - Improved posture

Second Grade

Free World U

Grade Two Language Arts

Reading Skills

- Syllables
Basic patterns such as v/cv = su/per, vc/cv = sup/per
- Day and Month Abbreviations
Common abbreviations for days, and months
- Street Abbreviations
Common abbreviations for street names
- Read fluently at grade level

Reading Literature

- Sayings
In hot water; learning the ropes; that was the last straw
- Tall Tales
Characteristics of tall tales; intro to well-known tales
- Story Elements
Practice identifying the plot, main characters, and setting in short stories
- Main Ideas
Intro to main ideas
- Supporting Details
Intro to supporting ideas; connecting supporting ideas to the main idea
- Reading for Information
Does knowing the author's purpose help you get information? How do you find the information you need? Asking questions to find information
- Retelling
Restating facts to clarify and organize ideas
- Books
Using titles, tables of contents, and chapter headings to locate information
- Making comparisons
Making comparisons between plots, settings, characters, between different endings, and between two versions of the same story that reflect different cultures
- Read A Novel
We assign a short, high-interest novel and present questions to determine the student's level of understanding

Reading Poetry

- Introduction to Poetry
Introduces and defines poetry. Why do people write poetry?
- Rhyme and Rhythm

Introduction

- Alliteration
Identifying and creating alliteration

Phonics and Spelling

- Vowel Digraphs
- Diphthongs
- Consonant Digraphs
- CVCE Words: Long A
- CVCE Words: Long E
- CVCE Words: Long I
- CVCE Words: Long O
- CVCE Words: Long U
- Schwa
- R Controlled Vowels: /ar/ sound
- R Controlled Vowels: /or/ sound
- R Controlled Vowels: /er/ sound
- R Controlled Vowels: /eer/ sound
- R Controlled Vowels: /air/ sound
- Compound Words
What is a compound word? Uses more difficult words than first-grade level and provides context for figuring out more difficult words
- Sight Words
We read these words that can't be sounded out while the student selects correct words from a list

Writing: Parts of Speech

- Nouns
Covers definition and provides practice finding nouns in short sentences
- Regular Plural Nouns
Regular plurals include -s, -es, -ies
- Irregular Plural Nouns
Includes words such as fly/flies and wife/wives
- Proper Nouns
Days, months, names, titles and initials of people
- Adjectives

Introduces and defines adjectives. Gives practice in choosing and locating adjectives

- Verbs
Introduces verbs as action words
- Past Tense Regular Verbs
Shows how to add –d or –ed to form the past tense
- Past Tense Irregular Verbs
Gives examples of irregular verbs
- Past and Present Tense Verbs
Determining tense
- Helping Verbs
Introduces helping verbs and shows their use in sentences
- Adverbs
Introduces adverbs and teaches how to create them from adjectives

Writing: Grammar

- Making a Contraction
Expands on knowledge of contractions introduced in first grade
- Using Commas in a Series
Introduces concept using simple-to-read series
- More Uses for a Comma
Using a comma to separate city and state and in writing dates
- Quotation Marks
When do we use quotation marks? What do they tell us?

Writing: Sentences

- What is a Sentence?
The components are: 1.) a subject that tells what the sentence is about, 2.) a verb that tells the action, 3.) it makes sense, 4) it begins with a capital letter, and, finally, 5.) It ends with punctuation; basic review
- Three Types of Sentences
Review declarative, interrogative, and imperative sentences. Practice the correct punctuation
- Fragments
Telling the difference between fragments and sentences
- Out of Order!
Putting scrambled sentences in the correct order. Ex: saw –we – a monkey – in a tree
- Handwriting
Write legibly and use proper form

Writing Applications

- Writing a Narrative Paragraph

What is a paragraph? Touch on prewriting, discuss how to write about something you've experienced and how to choosing details and maintain focus

- Revising
Rereading a paragraph looking for ways to improve sequence and ways to add interesting details
- Friendly Letters
Writing a friendly letter with the date, salutation, body, closing, and signature

Vocabulary

- Dictionary Skills: ABC Order
Putting words in ABC order
- Dictionary Skills: Dissecting Definitions
What is a dictionary? How to read definitions, sample sentences, pronunciation guides
- Dictionary Skills: Guide Words
What are guide words? Where are they found? How do they help you to find the word you are looking up? Examples
- Vocabulary Words A-B
- Vocabulary Words C-J
- Vocabulary Words K-O
- Vocabulary Words P-Z
- Using a Thesaurus
Explains use and gives examples
- Antonyms and Synonyms
What are they? Practice identifying
- Prefixes and Suffixes
Defines the terms; introduces common prefixes and suffixes, i.e. over-, un-, re-, -ing, -ly
- Words with Two Meanings
Don't use the word "homograph" but introduce the concept here that one word can have different meanings: bat, bark, etc
- Using an Atlas
Simple introduction to this reference book

Comprehension

- Reading Charts and Graphs
Why do we use charts and graphs? Explains how to read information; tests student's ability to answer simple questions that require them to read and interpret graph data
- Following Directions
Giving three- and four-step directions; following three- and four-step directions
- Cause and Effect
Simple introduction to cause and effect relationships

Oral Language

- Organizing a Speech
Beginning, ending, using a logical sequence, varying your pitch and pace
- Formal vs. Informal
What type of language do you use to speak to friends in a small group? What kind for delivering a report to the entire class? Details
- Delivering a Report
With facts and details, drawing from several sources of information
- Listening skills
Listening to obtain information, to solve problems, or for enjoyment
- Learning to Paraphrase
We give a short oral report and ask student to paraphrase it

Grade Two Math

Number Sense

- Working With Numbers to 1000
Count, read, and write whole numbers to 1,000 and identify the place value for each digit
- Expressing Numbers in Different Ways
Use words, models, and expanded forms (e.g., $45 = 4 \text{ tens} + 5$) to represent numbers (to 1,000)
- Ordering and Comparing
Order and compare whole numbers to 1,000 by using the symbols $<$, $=$, $>$
- Inverse Relationship
Understand and use the inverse relationship between addition and subtraction (e.g., an opposite number sentence for $8 + 6 = 14$ is $14 - 6 = 8$) to solve problems and check solutions
- Adding and Subtracting
Find the sum or difference of two whole numbers up to three digits long
- Mental Math
Use mental arithmetic to find the sum or difference of two two-digit numbers
- Methods of Multiplication
Use repeated addition, arrays, and counting by multiples to do multiplication
- Methods of Division
Use repeated subtraction, equal sharing, and forming equal groups with remainders to do division
- Memorizing Multiplication Facts
Know the multiplication tables of 2s, 5s, and 10s (to "times 10") and commit them to memory
- Knowing and Comparing Fraction Units
Recognize, name, and compare unit fractions from $1/12$ to $1/2$

- Recognizing Fractions in a Whole
Recognize fractions of a whole and parts of a group (e.g., one-fourth of a pie, two-thirds of 15 balls)
- Fractions That Make One
Know that when all fractional parts are included, such as four-fourths, the result is equal to the whole and to one
- Solving Money Problems
Solve problems using combinations of coins and bills
- Money Notation
Know and use the decimal notation and the dollar and cent symbols for money
- Measurement Estimation
Recognize when an estimate is reasonable in measurements (e.g., closest inch)

Algebra and Functions

- Commutative and Associative Mental Calculations
Use the commutative and associative rules to simplify mental calculations and to check results
- Problem Situations and Number Sentences
Relate problem situations to number sentences involving addition and subtraction
- Solving Problems Using Data
Solve addition and subtraction problems by using data from simple charts, picture graphs, and number sentences

Measurement and Geometry

- Measurement by Repeated Units
Measure the length of objects by iterating (repeating) a nonstandard or standard unit
- Measurement Units and Prediction
Use different units to measure the same object and predict whether the measure will be greater or smaller when a different unit is used
- Rounding Measurement
Measure the length of an object to the nearest inch and/ or centimeter
- Time Relationships and Rounding
Tell time to the nearest quarter hour and know relationships of time (e.g., minutes in an hour, days in a month, weeks in a year)
- Time Intervals
Determine the duration of intervals of time in hours (e.g., 11:00 a.m. to 4:00 p.m.)
- Describing and Classifying Shapes
Describe and classify plane and solid geometric shapes (circle, triangle, square, rectangle, sphere, pyramid, cube, rectangular prism) according to the number and shape of faces, edges, and vertices
- Combining Shapes
Put shapes together and take them apart to form other shapes (e.g., two congruent right triangles can be arranged to form a rectangle)

Statistics, Data Analysis, and Probability

- Recording Numerical Data
Record numerical data in systematic ways, keeping track of what has been counted
- Methods of Representing Data
Represent the same data set in more than one way (e.g., bar graphs and charts with tallies)
- Features of Data Sets
Identify features of data sets (range and mode)
- Representation Questions
Ask and answer simple questions related to data representations
- Patterns
Recognize, describe, and extend patterns and determine a next term in linear patterns (e.g., 4, 8, 12 ...; the number of ears on one horse, two horses, three horses, four horses)
- Problems Using Patterns
Solve problems involving simple number patterns

Mathematical Reasoning

- Determining Methods
Determine the approach, materials, and strategies to be used
- Using Math Tools
Use tools, such as manipulatives or sketches, to model problems
- Explaining Why
Defend the reasoning used and justify the procedures selected
- Computing and Checking
Make precise calculations and check the validity of the results in the context of the problem

Grade Two Science

Physical Sciences

- Object Position
Students know the position of an object can be described by locating it in relation to another object or to the background
- Object Motion
Students know an object's motion can be described by recording the change in position of the object over time
- Push and Pull
Students know the way to change how something is moving is by giving it a push or a pull. The size of the change is related to the strength, or the amount of force, of the push or pull

- Movement With Tools and Machines
Students know tools and machines are used to apply pushes and pulls (forces) to make things move
- Downward Pull of Gravity
Students know objects fall to the ground unless something holds them up
- Magnet Motion
Students know magnets can be used to make some objects move without being touched
- Sound
Students know sound is made by vibrating objects and can be described by its pitch and volume

Life Sciences

- Offspring of Their Own Kind
Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another
- Different Life Cycle Stages
Students know the sequential stages of life cycles are different for different animals, such as butterflies, frogs, and mice
- Reasons for Characteristics
Students know many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment
- Variations Within One Kind
Students know there is variation among individuals of one kind within a population
- Conditions Affecting Plant Development
Students know light, gravity, touch, or environmental stress can affect the germination, growth, and development of plants
- Flowers, Fruit and Plant Reproduction
Students know flowers and fruits are associated with reproduction in plants

Earth Sciences

- Properties of Rocks
Students know how to compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals
- Rocks of Different Sizes
Students know smaller rocks come from the breakage and weathering of larger rocks
- Soil
Soil is made partly from weathered rock and partly from organic materials; soils differ in their color, texture, capacity to retain water, and ability to support the growth of many kinds of plants
- Fossils
Students know that fossils provide evidence about the plants and animals that lived long ago and that scientists learn about the past history of Earth by studying fossils

- Human Use of Natural Resources
Students know rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use

Investigation and Experimentation

- Predictions from Observation
Make predictions based on observed patterns and not random guessing
- Using Metric Measurement Tools
Measure length, weight, temperature, and liquid volume with appropriate tools and express those measurements in standard metric system units
- Comparing and Sorting Objects
Compare and sort common objects according to two or more physical attributes (e. g., color, shape, texture, size, weight)
- Describing Scientific Investigation
Write or draw descriptions of a sequence of steps, events, and observations
- Creating Data Bar Graphs
Construct bar graphs to record data, using appropriately labeled axes
- Observing Very Small Objects
Use magnifiers or microscopes to observe and draw descriptions of small objects or small features of objects
- Following Oral Instructions
Follow oral instructions for a scientific investigation

Grade Two Social Studies

Long Ago and Yesterday

- Tracing the History of a Family
Primary and secondary sources, including artifacts, photographs, interviews, and documents
- Life Today and Yesterday
Compare and contrast their daily lives with those of their parents, grandparents, and/or guardians
- Sequencing Important Life Events
Timelines and storyboards

Map Skills

- Locating Places on a Simple Letter-Number Grid System
The specific locations and geographic features in a neighborhood or community, e.g., map of a classroom, a school
- North America
Labeling from memory a simple map the North America's countries, oceans, Great Lakes, major rivers, and mountain ranges; identifying essential map elements: title, legend, directional indicator, scale, and date

- Locating Places on a Map
Where their ancestors live (d), telling when the family moved to the local community, and how and why they made the trip
- Basic Land Use
Urban, suburban, and rural environments in California

Governmental Institutions and Practices

- Laws
How the United States and other countries make laws, carry out laws, determine whether laws have been violated, and punish wrongdoers
- Solving Conflicts
The ways in which groups and nations interact with one another to try to resolve problems in such areas as trade, cultural contacts, treaties, diplomacy, and military force

Basic Economic Concepts

- Food Production and Consumption Long Ago and Today
The roles of farmers, processors, distributors, weather, and land and water resources
- Buyers and Sellers
The role and interdependence of buyers (consumers) and sellers (producers) of goods and services
- Limited Resources
How limits on resources affect production and consumption - what to produce and what to consume

Individual Action and Character

- Abraham Lincoln
How he made a difference in others' lives
- Louis Pasteur
How he made a difference in others' lives
- Sitting Bull
How he made a difference in others' lives
- George Washington Carver
How he made a difference in others' lives
- Marie Curie
How she made a difference in others' lives
- Albert Einstein
How he made a difference in others' lives
- Golda Meir
How she made a difference in others' lives
- Jackie Robinson
How he made a difference in others' lives

- Sally Ride
How she made a difference in others' lives

Grade Two Health

Dangerous Situations / Safety Methods

- Traffic
- Improper Use of Medicines and Poisons
- Strangers

Source / Causes of Environmental Health Risks

- Air
- Soil
- Sun
- Water
- Noise
- Food
- Chemicals

Growth and Development

- Individual Differences
- Family Changes
- Self Image

Communication Skills

- Verbal
- Nonverbal

Relationships as a Learning Experience

- Friendship
- Parents and Family

Fear

- Behavioral
- Physiological

- Causes

Bullying

- Teasing
- Physical Bullying

Grade Two Manners

Basic Manners

- Please and thank you
 - Say “please” when you make a request
 - Say “thank you” when someone has done something for you
 - If you are thanked, say “you’re welcome”
- Waiting your turn
 - Do not interrupt other people when they are speaking
 - No one can be heard if too many voices are working at once
 - Give people your full attention when they are speaking
- No name calling
 - Name calling hurts people’s feelings
 - Instead of using labels, discuss behaviors that bother you
- Pleasant greetings
 - Always greet someone when they visit your home
 - Say “hi” so that guests feel welcome

Grade Two Character Development I

Character Study

- Conscience and Ethics

Learning the Traits

- Tolerance

- Courage
- Responsibility

Character in Action

- Recognizing Character

Role Play

- Doing the Right Thing

Grade Two Character Development II

Character Study

- What are morals?
Know the definition of morals: motivation based on ideas of right and wrong
Identify positive morals: respect, responsibility, courage, honor, honesty, tolerance, diligence, fairness
- How do our morals form? They are taught by parents, teachers, significant role models. Understand that morals are not instinctively learned.
- Why are morals important? Morals help guide a functioning society; likewise, morals are necessary for the success and happiness of society and individuals.

Learning the Traits

- Virtue
Know the definition of virtue: the moral excellence evident in consistently doing what is right.
- Sincerity
Know the definition of sincerity: an eagerness to do what is right with transparent motives.

Character in Action

- Recognizing character through behavior
Identifying examples of key character traits:
Virtue: Name a person in your life or history who has displayed virtue – what have they done to demonstrate this trait?

Sincerity: A friend calls you over to tell you that their feelings were hurt by a classmate – you listen to them and show genuine concern. Sincerity is apparent in your level of attentiveness, expression and consideration.

Grade Two Interpersonal Relationships

Relationship Development

Stages of a relationship (friendship or romantic partner) include:

- Acquaintance – the stage where you get to know someone; depends on previous relationships, geographical location; if two people begin to like each other, continued interactions can lead to the next stage; otherwise, the acquaintance stage can continue indefinitely
- Buildup – the stage where you begin to trust and care about another person; common interests, background and goals may affect the success of this stage and whether the next stage is reached
- Continuation – the stage where a mutual commitment to each other is formed (either by a long-term friendship, romantic relationship, or marriage); this stage can be long and relatively stable; the stage is marked by growth and development of the relationship
- Deterioration – not every relationship reaches this stage; deteriorating relationships show signs of trouble including boredom, resentment and dissatisfaction; stage is often marked by lack of communication or trust
- Termination – the final stage of a relationship, reached either by death of one person in the relationship or by a choice to separate

Grade Two Health & Wellness

Diet & Nutrition

- What is diet?

Diet is a person's usual food and drink; there are many rewards to maintaining a healthy diet.

Benefits of healthy eating include:

- Increased energy levels
- Stronger immune system (protection against sickness)
- Healthy body weight
- Better sleep
- Better mood

- Healthy eating patterns include:
 - Eating a variety of nutrient-rich, unprocessed foods
 - Eating plenty of whole grains, fruits and vegetables
 - Drinking plenty of water (6-8 glasses) daily
 - Limiting fattening, sugary snacks
 - Eating regular meals and healthy snacks; not skipping meals
 - Eating reasonable portions of food

Sleep

- What is sleep? Why is it important?

Sleep is a natural and periodic state of rest during which consciousness of the world is suspended; sleep is essential to physical and emotional health.

- Benefits of healthy sleep patterns include:
 - Improved mood
 - Stronger performance/alertness
 - Greater protection against sickness
- Healthy sleep patterns include:
 - A consistent bedtime routine
 - A consistent sleep schedule (go to sleep at the same time each night)
 - Avoiding exercise within 2-3 hours of going to sleep
 - Avoiding eating immediately before going to sleep
 - Establishing a comfortable sleep environment, free of excessive noise and light

Third Grade

Free World U

Grade Three Language Arts

Parts of Speech

- Parts of Speech
Review
- Nouns
Practice identifying common and proper nouns
- Possessive Nouns
How to make nouns possessive
- Adjectives
Review
- Verbs
Review
- Adverbs
Review
- Pronouns and Antecedents
Introduction to both parts of speech with practice finding them in sentences
- Articles
Introduction to “a,” “an,” and “the”
- Helping Verbs
Review

Grammar

- Using Commas in a Series
- Other Uses for a Comma
Dates, city and state, addresses; review
- Titles
Punctuating titles of books and movies
- Contractions

Writing Sentences

- Subject-Verb Agreement
What makes a subject and verb agree? Practice finding errors
- Determining Tense
Review of past, present, and future verb tenses
- Capitalization
Review of all capitalization rules
- Sentence Types
Recognizing and writing declarative, interrogative, imperative, and exclamatory sentences

Writing Paragraphs

- Prewriting
Researching, organizing your thoughts
- Introduction
How to write an introduction
- Body
How to write the body
- Closing
How to write a closing
- Revising a Paragraph
How to revise your work
- Your Turn: Writing Non Fiction
Write a non-fiction paragraph using an example paragraph; students write a non-fiction paragraph demonstrating understanding of topic sentences, a supporting body, and a proper closing; students revise their work using provided "Editor's Checklist", reminding them to check spelling, add details, etc.
- Your Turn: Writing a Narrative
Write a narrative paragraph using an example paragraph; students write a narrative paragraph demonstrating understanding of topic sentences, a supporting body, and a proper closing; students revise their work using provided "Editor's Checklist", reminding them to check spelling, add details, etc.
- Handwriting
Write legibly and use proper form

Writing Letters

- Determining your Audience
Who is the letter's intended audience
- Types of Letters
Friendly letters and business letters
- Using Correct Letter Format
What to include and what the layout should be
- Invitations
What should be included in an invitation; what is an RSVP?

Writing Stories

- Developing a Character
Insight into how to make a character interesting and consistent; using details
- Developing a Plot
Causing trouble for your character, getting him out of it, staying on course
- Choosing a Setting
Where will the action take place? Providing details so readers can "see" the story

- Wrapping it Up
The story should climax then wrap up details; character should solve problems himself and perhaps learn something, etc
- Your Turn
Students write a story, demonstrating an understanding of character, plot, setting, and conclusion

Reading Literature

- What's What?
Naming and defining poetry, drama, fiction and nonfiction
- Idioms and Sayings
Put on your thinking cap; A diamond in the rough; Saved by the bell
- Greek Myths
Introduction to Greek myths
- Norse Myths
Introduction to Norse myths
- Native American Myths
Introduction to Native American myths
- Determining Tone and Mood
Definitions; how tone and mood are created
- Theme
What is a theme?
- Speeches from America's History
Introduction to great speeches
- Author's Purpose
Determining purpose
- Fact vs. Opinion
Separating fact from opinion
- Getting to Know Characters
Determining what characters are like by their actions and words or by author portrayal; identifying the speaker or narrator in a selection of writing; predicting what a character might do next, based on knowledge gleaned from reading
- Reading Aloud
Students read aloud fluently and at grade level
- Read A Novel
We assign a short, high-interest novel and present questions to determine the student's level of understanding

Poetry

- Themes in Poetry
Introduction to finding themes
- Onomatopoeia

- Rhyme and Meter
- Simile and Metaphor
Practice in finding them and distinguishing them from one another
- Fact vs. Opinion
Determining which is which

Spelling

- Homophones
- Homographs
- Word Families
Using complex word families, such as –ight, -eave, and ought to decode complicated new words
- Short Vowel Sounds
- Double consonants
- It's and Its
- Alphabetizing
Putting similar words in correct alphabetical order, for instance: combine, compose, computer
- Irregular plurals
Change the "y" to "i" and add –es; add "s" to words that end in –y preceded by a vowel; other irregulars

Vocabulary

- Context
Using knowledge of synonyms and antonyms and other sentence context to determine the meaning of unfamiliar words
- Prefixes and Suffixes
Using knowledge of prefixes and suffixes to determine the meaning of words
- Word Relationships
Understanding grade-level chains of information such as: living thing – animal – reptile – snake
- Vocabulary A-C
- Vocabulary D-J
- Vocabulary K-R
- Vocabulary S-Z

Reading for Information

- Finding Information
Using titles, tables of contents, chapter headings, glossaries, and indexes to find information in a book
- Finding Answers
Demonstrate understanding by locating answers to questions within blocks of fiction and non-fiction text; practice the skill of recalling more than one major point of an article; demonstrate ability to locate problems and solutions in text and separate main ideas from supporting ideas
- Reading Directions
Reading multiple-step directions, such as those found with a board game

Using Reference Materials

- Using an Atlas
Explains structure and organization
- Using a Dictionary
Expands on knowledge gained in grade two; gives lengthier dictionary entries for students to decipher; adds parts of speech to the definitions
- Using an Encyclopedia
Organization and use
- Using a Thesaurus

Oral Language

- Writing a Speech
How to do it; writing an opening, middle, and ending; how to organize your speech, either chronologically or around major points of information
- Delivering a Speech
Using props, varying your tone and rate of delivery, keeping the audience's attention, handling nerves
- Reciting Poetry
Capturing the author's tone; practicing your pitch and delivery
- Listening Skills
Students listen to a short oral story -- a legend or unfamiliar fictional story -- and then answer regular flash-card style questions
- Listening Skills II
First students listen to a short oral piece of non-fiction. Then they read a short piece of non-fiction related to the oral presentation. Step three is to answer regular flash-card style questions, including comparing and contrasting the presentations
- Answering Questions
In everyday life, you're asked many questions. What is small talk? When should you elaborate? How do you keep a conversation going? Can you connect a similar experience you've had to one a friend is sharing?

Grade Three Math

Number Sense

- Numbers to 10,000
Count, read, and write whole numbers to 10,000; compare and order whole numbers to 10,000
- Place Value
Identify the place value for each digit in numbers to 10,000
- Rounding
Round off numbers to 10,000 to the nearest ten, hundred, and thousand
- Expanded Notation
Use expanded notation to represent numbers (e.g., $3,206 = 3,000 + 200 + 6$)
- Adding Large Numbers
Find the sum of two whole numbers between 0 and 10,000
- Subtracting Large Numbers
Find the difference between two whole numbers between 0 and 10,000
- Multiplication Tables
Memorize to automaticity the multiplication table for numbers between 1 and 10
- Inverse Relationships
Use the inverse relationship of multiplication and division to compute and check results
- Multiplying Large Numbers
Solve simple problems involving multiplication of multidigit numbers by one-digit numbers ($3,671 \times 3 = \underline{\quad}$)
- Dividing Large Numbers
Solve simple problems involving division of multidigit numbers by one-digit numbers ($135 \div 5 = \underline{\quad}$)
- Special Properties of 1 and 0
Understand the special properties of 0 and 1 in multiplication and division
- Calculating Cost
Determine the unit cost when given the total cost and number of units
- Using Multiple Skills
Solve problems that require two or more of the skills previously taught in 3rd grade (working with large numbers, inverse relationships, multiplication and division skills, figuring cost etc.)
- Comparing Fractions Using Drawings
Compare fractions represented by drawings to show equivalency.
- Comparing Fractions
Add and subtract fractions in context ($1/2$ of a pizza is the same as $2/4$ of another same size pizza; show that $3/8$ is larger than $1/4$)
- Adding Fractions
- Add simple fractions (e.g., determine that $1/8 + 3/8$ is the same as $1/2$)

- Subtracting Fractions
Subtract simple fractions (e.g., determine that $\frac{1}{8} + \frac{3}{8}$ is the same as $\frac{1}{2}$)
- Adding and Subtracting using Money Notation
Addition and subtraction of money amounts in decimal notation.
- Multiplying and Dividing Using Money Notation
Multiplication and division of money amounts in decimal notation; multiply and divide money amounts in decimal notation by using whole-number multipliers and divisors
- Relationship Between Fractions and Decimals
Know and understand that fractions and decimals are two different representations of the same concept (e.g., 50 cents is $\frac{1}{2}$ of a dollar, 75 cents is $\frac{3}{4}$ of a dollar)

Algebra and Functions

- Creating and Solving Math Problems
Represent relationships of quantities in the form of mathematical expressions, equations, or inequalities; solve problems involving numeric equations or inequalities
- Using Math Symbols
Select appropriate operational and relational symbols to make an expression true (e.g., if $4 _ 3 = 12$, what operational symbol goes in the blank?)
- Unit Conversions
Express simple unit conversions in symbolic form (e.g., $_ \text{ inches} = _ \text{ feet} \times 12$)
- Properties of Multiplication
Recognize and use the commutative and associative properties of multiplication (e.g., if $5 \times 7 = 35$, then what is 7×5 ? and if $5 \times 7 \times 3 = 105$, then what is $7 \times 3 \times 5$?)
- Relationships Between Quantities
Solve simple problems involving a functional relationship between two quantities (e.g., find the total cost of multiple items given the cost per unit)
- Linear Patterns
Extend and recognize a linear pattern by its rules (e.g., the number of legs on a given number of horses may be calculated by counting by 4s or by multiplying the number of horses by 4)

Measurement and Geometry

- Metric and U.S. Measurement
Choose the appropriate tools and units (metric and U.S.) and estimate and measure the length, liquid volume, and weight/mass of given objects
- Area and Volume Using Units
Estimate or determine the area and volume of solid figures by covering them with squares or by counting the number of cubes that would fill them
- Polygons
Identify, describe, and classify polygons (including pentagons, hexagons, and octagons); find the perimeter of a polygon with integer sides
- Measurement Conversions
Carry out simple unit conversions within a system of measurement (e.g., centimeters and meters, hours and minutes)

- Attributes of Triangles
Identify attributes of triangles (e.g., two equal sides for the isosceles triangle, three equal sides for the equilateral triangle, right angle for the right triangle)
- Attributes of Quadrilaterals
Identify attributes of quadrilaterals (e.g., parallel sides for the parallelogram, right angles for the rectangle, equal sides and right angles for the square)
- Right Angles
Identify right angles in geometric figures or in appropriate objects and determine whether other angles are greater or less than a right angle
- 3-Dimensional Objects
Identify, describe, and classify common three-dimensional geometric objects (e.g., cube, rectangular solid, sphere, prism, pyramid, cone, cylinder)
- Recognizing Object Relationship
Identify common solid objects that are the components needed to make a more complex solid object

Statistics, Data Analysis, and Probability

- Probability of Common Events
Identify whether common events are certain, likely, unlikely, or improbable
- Recording Possible and Actual Outcomes
Record the possible outcomes for a simple event (e.g., tossing a coin) and systematically keep track of the outcomes when the event is repeated many times
- Summarize and Display Results
Summarize and display the results of probability experiments in a clear and organized way (e.g., use a bar graph or a line plot)
- Predicting Future Events
Use the results of probability experiments to predict future events (e.g., use a line plot to predict the temperature forecast for the next day)

Mathematical Reasoning

- Analyzing Problems
Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns
- Simplifying Problems
Determine when and how to break a problem into simpler parts
- Verifying Results by Estimation
Use estimation to verify the reasonableness of calculated results
- Applying Strategies and Results
Apply strategies and results from simpler problems to more complex problems
- Explain Your Reasoning
Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning
- Expressing Solutions

Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work

- Estimation
Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy
- Results That Make Sense
Make precise calculations and check the validity of the results from the context of the problem; evaluate the reasonableness of the solution in the context of the original situation
- Applying Knowledge
Note the method of deriving the solution and demonstrate a conceptual understanding by solving similar problems; develop generalizations of the results obtained and apply them in other circumstances

Grade Three Science

Physical Sciences

- Solar Energy
Students know energy comes from the Sun to Earth in the form of light
- Stored Energy
Students know sources of stored energy take many forms, such as food, fuel, and batteries
- Energy, Motion and Heat
Students know machines and living things convert stored energy to motion and heat
- Waves of Energy
Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects
- Three Forms of Matter
Students know matter has three forms: solid, liquid, and gas
- Evaporation and Melting
Students know evaporation and melting are changes that occur when the objects are heated
- Combining Substances
Students know that when two or more substances are combined, a new substance may be formed with properties that are different from those of the original materials
- Atoms
Students know all matter is made of small particles called atoms, too small to see with the naked eye
- Elements
Students know people once thought that earth, wind, fire, and water were the basic elements that made up all matter. Science experiments show that there are more than 100 different types of atoms, which are presented on the periodic table of the elements
- Shadow and Reflection

Students know sunlight can be blocked to create shadows; Students know light is reflected from mirrors and other surfaces

- Light and Color
Students know the color of light striking an object affects the way the object is seen
- Light and Vision
Students know an object is seen when light traveling from the object enters the eye

Life Sciences

- Plant and Animal Structures
Students know plants and animals have structures that serve different functions in growth, survival, and reproduction
- Diversity of Life Forms
Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands
- Living Things and the Environment
Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial
- Effects of Environmental Changes
Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations
- Extinction
Students know that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today

Earth Sciences

- Star Patterns
Students know the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons
- Lunar Cycle
Students know the way in which the Moon's appearance changes during the four-week lunar cycle
- Telescopes
Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye
- Relationship Between Earth, Moon and Sun
Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth
- Position of the Sun
Students know the position of the Sun in the sky changes during the course of the day and from season to season

Investigation and Experimentation

- Repeating Observations and Investigations
Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation
- Separating Evidence from Opinion
Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed
- Using Numerical Data
Use numerical data in describing and comparing objects, events, and measurements
- Predicting Outcomes
Predict the outcome of a simple investigation and compare the result with the prediction
- Collecting and Analyzing Data
Collect data in an investigation and analyze those data to develop a logical conclusion

Grade Three Social Studies

Physical and Human Geography

- Geographical Features in Local Regions
e.g., deserts, mountains, valleys, hills, coastal areas, oceans, lakes; use of maps, tables, graphs, photographs, and charts to organize information about people, places, and environments
- Resources and Environment
The ways in which people have used the resources of the local region and modified the physical environment - e.g., a dam constructed upstream changed a river or coastline

Local American Indian Nations

- Culture
National identities, religious beliefs, customs, and various folklore traditions
- Environment
How physical geography, including climate, influenced how the local Indian nations adapted to their natural environment - how they obtained food, clothing, tools
- Economy and Government
Particularly those with tribal constitutions, and their relationship to federal and state governments
- New Settlers
Integration of settlers with the already established Indians of the region

Local Historical Events

- Explorers and Newcomers
Explorers who visited here, newcomers who settled here, and the people who continue to come to the region, including their cultural and religious traditions and contributions
- Economy
Economies established by settlers and their influence on the present-day economy; the importance of private property and entrepreneurship

- Community
Why their community was established, how individuals and families contributed to its founding and development, how the community has changed over time, drawing on maps, photographs, oral histories, letters, newspapers, other primary sources

Rules, Laws, and the U.S. Government

- Purpose
The reasons for rules, laws, and the U.S. Constitution; the role of citizenship in the promotion of rules and laws; the consequences for people who violate rules and laws
- Public Virtue and the Role of Citizens
How to participate in a classroom, in the community, and in civic life
- Important Landmarks, Symbols, and Documents
Histories of the U.S. flag, the bald eagle, the Statue of Liberty, the U.S. Constitution, the Declaration of Independence, the U.S. Capitol
- The Three Branches of Government
Emphasis on local government
- Contributions of California
How California, the other states, and sovereign American Indian tribes contribute to the making of our nation and participate in the federal system of government
- American Heroes
Describe the lives of Anne Hutchinson, Benjamin Franklin, Thomas Jefferson, Abraham Lincoln, Frederick Douglass, Harriet Tubman, Martin Luther King, Jr.

Economic Reasoning and the Local Economy

- Resources
How local producers have used and are using natural resources, human resources, and capital resources to produce goods and services in the past and the present
- Source of Goods
Some goods are made locally, some elsewhere in the United States, and some abroad
- Choice
Individual economic choices involve trade-offs and the evaluation of benefits and costs
- Importance of Work
The relationship of students' "work" in school and their personal human capital

Grade Three Health

Getting Along With Others

- Following Directions
- Different Types of Messages
- Conversations With Others
- Sharing

- Bullying

Working and Playing

- Ignoring Distractions in Class
- Transitioning from One Activity to Another Appropriately
- Using Free Time Correctly

Homework and Schoolwork

- Finishing Work on Time
- Using Materials Appropriately
- Completing Homework
- Doing Work Correctly
- Using Time Wisely

Responsibility

- How to Ask For Help
- Paying Attention
- Telephone Manners
- Getting Permission

Conflict Resolution

- Accepting Differences in Others
- Accepting Peer's Suggestions
- Peer Pressure
- Compromise

Anger Management

- Handling Teasing
- Handling Criticism
- How to Stay Calm

School Social Skills

- How to Make Eye Contact
- How to Ask a Question

- How to Stay on Task
- How to Use Body Basics

Friendship Skills

- Greeting Others
- Waiting Your Turn
- Asking Someone to Join
- Offering Help

Appearance

- Keeping Self Clean
- Combing Your Hair
- Brushing Your Teeth
- Getting Dressed

Grade Three Manners

Basic Manners

- Accepting compliments
 - Take compliments graciously by saying “thank you”
 - Do not point out flaws or put yourself down
- Cleaning up after yourself
 - Whether at home or elsewhere, always pick up after yourself
 - Pick up a mess before moving onto another activity
- Good sportsmanship
 - Always be pleasant during and after a game is played
 - If you win, do not gloat – be kind
 - If you lose, do not sulk – congratulate the winning player

Grade Three Character Development I

Character Study

- Values

Learning the Traits

- Citizenship
- Commitment
- Discipline

Character in Action

- Recognizing Character

Role Play

- Doing the Right Thing

Grade Three Character Development II

Character Study

- What are ethics?
Know the definition of ethics: the philosophical study of moral values and rules
- Social ethics: maintaining a personal code of conduct based on respect for one's self, others and surroundings
- What other arenas have accepted codes of ethics? business/professional ethics; legal ethics; medical ethics. Why are ethics in these areas important? Ethics establish expectations and standards and encourage responsible behavior

Learning the Traits

- Responsibility
Know the definition of responsibility: a form of trustworthiness; the trait of being answerable to someone for something or being responsible for one's conduct
- Citizenship
Know the definition of citizenship: the status and/or conduct of a citizen with rights and duties; caring for more than oneself (the community, the world, etc.)

Character in Action

- Recognizing character through behavior

Examples of key character traits:

Responsibility: What are some of the responsibilities kids your age have? What are some of the rewards for being a responsible person?

Citizenship: Discussion Topic – What makes a community or neighborhood a nice place to live? What can you do in your own community to make it a better place?

Grade Three Interpersonal Relationships

Family Relationships

- Family Rules

Each family has its own set of relationship rules (spoken and unspoken beliefs and standards of behavior) that impact individual perspective on relationships. These rules can continue to shape your outlook on relationships and influence your interactions with others; it is important to identify any unspoken relationship rules in your family and consider how they may influence you.

Common family relationship rules may include:

- Never reveal your true feelings
- Never hide your emotions
- Never raise your voice
- Always make your point
- Never call attention to yourself
- Make others aware of your accomplishments
- Put on a happy face
- Always be genuine

- Family Roles

Most families have an established set of roles that are assigned (officially or unofficially) to family members; these roles can develop into lifelong patterns of behavior in individuals and may affect other relationships these individuals have with people outside of the family.

Significant factors shaping family roles include birth order, gender and sibling dynamics; there are several common roles that are often played out in a family unit including:

- Problem-solver – family member who is always prepared to offer a solution
- Victim – family member who pulls compassion and sympathy from others
- Rescuer – family member who involves themselves in situations to ensure safety of others
- Comedian – family member who is ready with a joke for comic relief

- Mediator – family member who serves as a bridge between other family members
 - Confronter – family member who observes harsh realities and calls attention to these details
 - Healer – family member who helps others heal emotional wounds
 - Secret-keeper – family member who can always be trusted to hold a confidence tight
- Example Setting/Modeling

Family lessons on relationships are most powerfully taught by example – individuals learn how to feel, think and act by observing the people they live with. These examples shape the types of relationships that are shared with individuals outside of the family unit.

Patterns of behavior that often set a lasting example on relationship development include:

- Expression of anger
- Expression of affection
- Methods of communication (talking and listening)
- Methods of dealing with (or avoiding) conflict

Grade Three Health & Wellness

Healthcare

- What is healthcare?

Healthcare is the preservation of mental and physical health by preventing or treating illness through services offered by the health profession (doctors, nurses, dentists, etc.)

- Healthcare should be a proactive process – individuals should maintain annual visits with a doctor even when there are no signs of sickness or disease; these examinations can help in the prevention and/or early detection of illness.

What to expect at a check up:

- Weigh in
- Temperature reading
- Pulse reading
- Blood pressure reading
- Screenings
- Vaccinations

Fourth Grade

Free World U

Grade Four Language Arts

Parts of Speech

- Adverbs
Practice finding adverbs; practice with comparatives and superlatives
- Irregular Verbs
- Prepositions
Practice with prepositions, prepositional phrases, and direct and indirect objects
- Conjunctions
- Pronouns and Pronoun Case
Personal, subjective, and objective case pronoun usage

Writing Sentences

- Using Commas in a Series
Reviews commas in a series
- Using Commas to Combine Sentences
Combining sentences using commas with and without conjunctions
- Using Quotations
Defines quotations and teaches students standard capitalization and punctuation quotations within a longer sentence.
- Compound and Complex Sentences
Defines and teaches correct usage
- Finding and Correcting Run-On Sentences
Defines and teaches ways to repair run-on sentences
- Combining Short Sentences
Combining thoughts by use of participial phrases, prepositional phrases, and use of adverbs or adjectives
- Polishing your Punctuation
Review of quotations, commas in quotations, and apostrophes in possessive nouns and contractions; introduction of, and practice using, parentheses
- Document Titles
Identify titles of books, movies, newspapers, etc.
- Capitalization
Reviews capitalization rules for periodical titles; introduces capitalization rules for works of art, musical compositions, organizations and businesses, and the first word in quotations when needed

Writing Paragraphs

- Purpose and Audience
Review: Why do we write? To inform? Entertain? To whom are we writing?

- Main Idea and Supporting Details
Practice identifying main ideas and proper supporting details
- Writing a Paragraph
A how-to lesson; includes prewriting techniques
- Problems in Paragraphs: Consistency and Coherency
Maintaining a focus; making sense
- Problems in Paragraphs: Proper Vocabulary
Slang, jargon, formal vs. informal writing, etc.
- Writing About a Character
Tips and examples; students write about a favorite literary character and edit their work; student should provide insight as to why he likes this character and what similarities or differences this character has to himself
- Writing About Literature
Students read a short piece of literature and write a paragraph summing up the main point and supporting details, with guidance from flashcards
- Writing About Non-Fiction
Tips and examples; students write a how-to paragraph and edit their work
- Penmanship
Write legibly in cursive

Writing an Essay

- The Informational Essay
Structure of an informational essay, which includes an introductory paragraph, paragraphs of supporting details that begin with topic sentences, and a concluding paragraph that sums it up; paragraphs should be indented, and the essay should have a title
- Choosing a Topic
A topic should be of interest to your readers and shouldn't be too broad or too narrow for the length of your essay
- Writing an Informational Essay
Walks students through the process of writing an entire informational essay with special attention given to the thesis statement
- Editing an Essay
Includes all the things to look for: spelling, punctuation, etc, with focus on asking questions such as: Does this make sense? Is this the best order to use? Could I use a more interesting verb or add description anywhere? Should I combine any sentences? Suggests reading work aloud
- Your Turn: Writing an Informational Essay
Write an informational essay on a topic of their choice, using what the students have learned in this section; remind students to use an introductory paragraph with a clearly-stated topic sentence, supporting paragraphs, a concluding paragraph, and correct indentation; students should use several sources and correctly cite the sources in this essay; students should edit their work
- The Narrative Essay

The purpose of a narrative essay which is an essay that tells a personal experience with details and personal feelings included; paragraphs should be indented, and the essay should have a title

- Your Turn: Writing a Narrative Essay
Shows example of narrative essay and asks student to write his own (see style instructions for Informational essay)

Reading Literature

- Sayings
An ounce of prevention is worth a pound of cure. It knocked my socks off. Back to square one.
- Regional and Global Sayings
Expressions people use in one part of the country or world and how they reflect local culture
- Characteristics of Non-Fiction
Challenges students to identify biographies, autobiographies and memoirs
- Figurative Language
Defines simile, metaphor, hyperbole, and personification; students practice identifying figurative language
- Reading Aloud
Students read fluently and accurately with expression and at grade level
- Fables
Students read a fable and learn about structural elements of fables
- Myths
Students read a myth and learn about structural elements of myths
- Legends
Students read a legend and learn about structural elements of legends while answering questions about characters and setting
- Fairy Tales
Students read a fairy tale and learn about structural elements of fairy tales while answering questions about character motivation, and the main events of the plot, their causes and influence on the rest of the story
- Comparing Structural Features
Students compare and contrast structural features of fables, myths, legends, and fairy tales
- Around the World
Compare and contrast a character type that appears in fiction around the world and discuss why such a character appeals to people in such diverse cultures
- Read A Novel
We assign a short, high-interest novel and present questions to determine the student's level of understanding

Research and Technology

- Almanacs

What information is found in an almanac?

- Using Indexes and Tables of Contents
Finding information in an index or table of contents
- Types of Periodicals
Newspapers, journals, magazines
- Judging Internal Consistency
Does an article maintain focus? Practice determining logical arguments
- Making Inferences and Drawing Conclusions
Predicting outcomes based on life experiences
- Using a Thesaurus
Using a thesaurus to find new words; judging the appropriateness of these words
- Using an Encyclopedia
What types of information is found in these? Finding information in an article by skimming; paraphrasing
- Using Internet Sources
Judging sources; internet safety
- Citing your sources
Quoting and paraphrasing information sources and citing them correctly; defining and discussing plagiarism
- Evaluating the Media
How do the media focus attention on events? How do the media shape peoples' opinions?
- Computer terminology
Identify and explain uses for cursor, software, memory, disk drive, hard drive, computer, monitor, etc.
- Introduction to Keyboarding
Demonstrates basic keyboarding techniques

Vocabulary

- Common Root Words in American English
Introduction to common Latin and Greek roots; practice figuring word meanings based on root meanings
- Common Word Parts
Explains meanings of common prefixes, suffixes, and root words and gives students practice defining words based on this knowledge
- Homonyms
Distinguish between advanced homophones and homographs in context
- Vocabulary A-C
- Vocabulary D-J
- Vocabulary K-R
- Vocabulary S-Z

Reading Nonfiction

- Cause and Effect
Practice identifying cause and effect
- Compare and Contrast
Practice reading passages, finding, and understanding this technique
- Chronological Order
Practice reading passages, finding, and understanding this technique
- Proposition and Support
Practice reading passages, finding, and understanding this technique
- Fact vs. Opinion
Practice reading passages, finding, and understanding this technique

Comprehension

- Following Directions
Follow multiple-step instructions
- Three Ways to Read
Reading carefully for deep understanding, skimming to find specific information, and reading for enjoyment
- Make a Prediction
Predicting action and outcomes in text using titles, topic sentences, foreshadowing, illustrations, etc
- Context
Determining the meaning of unfamiliar words using context
- Your Opinion Counts
Test new information against what you already know; compare and contrast information on the same topic after reading several passages

Listening Skills

- Listening to Literature
Answering questions after listening to an oral story
- Listening to Non Fiction
Answering questions after listening to an oral presentation

Speaking Skills

- Introduction to Writing a Speech
How to write an effective speech, including using anecdotes and traditional structure
- Effective Public Speaking Techniques
How to capture and hold your listeners' attention by varying pitch, gesturing, asking questions, using props, etc

- **Your Turn: Delivering an Informational Speech**
Students deliver an informational speech with a clear focus; they emphasize important points and use proper pitch and modulation; they use tools they've learned in this section such as using anecdotes, posing and answering a question, using strong details, adding gestures or props as appropriate, etc.; they use more than one source for their information
- **Your Turn: Talking about a Book**
Flashcards teach students about the important elements of an oral book report; students present an oral report demonstrating an understanding of flashcard content
- **Your Turn: Telling about an Event**
Students use knowledge of speech writing and delivery to make an effective oral presentation of a memorable event in their own, or someone else's, life; speech should include strong sensory details and an explanation of why this event is memorable
- **Recite a poem**
Students recite a memorized poem of two or three stanzas; students speak clearly and use proper phrasing
- **Asking and Telling**
Students orally demonstrate an ability to ask thoughtful questions, respond with appropriate elaboration to oral questions posed to them, and demonstrate an ability to give precise instructions

Grade Four Math

Number Sense

- **Working With Numbers in Millions**
Read and write whole numbers in the millions
- **Numbers to Two Decimal Places**
Order and compare whole numbers and decimals to two decimal places
- **Rounding Numbers**
Round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand, or hundred thousand
- **When to Use Rounding**
Decide when a rounded solution is called for and explain why such a solution may be appropriate
- **Different Interpretations of Fractions**
Explain different interpretations of fractions, for example, parts of a whole, parts of a set, and division of whole numbers by whole numbers; explain equivalents of fractions
- **Fraction and Decimal Notation**
Write tenths and hundredths in decimal and fraction notations and know the fraction and decimal equivalents for halves and fourths (e.g., $1/2 = 0.5$ or $.50$; $7/4 = 1 \frac{3}{4} = 1.75$)
- **Fractions Represented by a Figure**
Write the fraction represented by a drawing of parts of a figure; represent a given fraction by using drawings; and relate a fraction to a simple decimal on a number line
- **Negative Numbers**
Use concepts of negative numbers (e.g., on a number line, in counting, in temperature, in "owing")

- Position on a Number Line
Identify on a number line the relative position of positive fractions, positive mixed numbers, and positive decimals to two decimal places
- Problems Using Decimals
Estimate and compute the sum or difference of whole numbers and positive decimals to two places
- Rounding Decimals
Round two-place decimals to one decimal or the nearest whole number and judge the reasonableness of the rounded answer
- Adding Using Standard Algorithms
Demonstrate an understanding of, and the ability to use, the standard algorithm for the addition of multi digit numbers.
- Subtracting Using Standard Algorithms
Demonstrate an understanding of, and the ability to use, standard algorithms for the subtraction of multi digit numbers
- Multiplying Using Standard Algorithms
Demonstrate an understanding of, and the ability to use standard algorithms for multiplying a multi digit number by a two-digit number
- Dividing Using Algorithms
Demonstrate an understanding of, and the ability to use standard algorithms for dividing a multi digit number by a one-digit number
- Relating Multiplication and Division
Use relationships between multiplication and division to simplify computations and check results.
- Multiplying Multi Digit Numbers
Solve problems involving multiplication of multi digit numbers by two-digit numbers
- Dividing Multi Digit Numbers
Solve problems involving division of multi digit numbers by one-digit numbers
- Breaking Down Whole Numbers
Understand that many whole numbers break down in different ways (e.g., $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$)
- Prime Numbers
Know that numbers such as 2, 3, 5, 7, and 11 do not have any factors except 1 and themselves and that such numbers are called prime numbers

Algebra and Functions

- Understanding and Using a Variable
Use letters, boxes, or other symbols to stand for any number in simple expressions or equations (e.g., demonstrate an understanding and the use of the concept of a variable)
- Parentheses in Mathematical Expressions
Interpret and evaluate mathematical expressions that now use parentheses
- Parentheses and Order of Operations

Use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations

- Using Formulas
Use and interpret formulas (e.g., area = length x width or $A = lw$) to answer questions about quantities and their relationships
- Equations with Two Variables
Understand that an equation such as $y = 3x + 5$ is a prescription for determining a second number when a first number is given
- Equals
Know and understand that equals added to equals are equal; know and understand that equals multiplied by equals are equal

Measurement and Geometry

- Measuring Rectangular Shapes
Measure the area of rectangular shapes by using appropriate units, such as square centimeter (cm^2), square meter (m^2), square kilometer (km^2), square inch (in^2), square yard (yd^2), square mile (mi^2)
- Areas and Perimeters of Rectangles
Recognize that rectangles that have the same area can have different perimeters; understand that rectangles that have the same perimeter can have different areas
- Using Formulas with Complex Figures
Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use those formulas to find areas of more complex figures by dividing the figures into basic shapes
- Graphing Linear Relationships
Draw the points corresponding to linear relationships on graph paper (e.g., draw 10 points on the graph of the equation $y = 3x$ and connect them by using a straight line)
- Length of Line Segments
Understand that the length of a horizontal line segment equals the difference of the x-coordinates; understand that the length of a vertical line segment equals the difference of the y-coordinates
- Parallel and Perpendicular Lines
Identify lines that are parallel and perpendicular
- Radius and Diameter of a Circle
Identify the radius and diameter of a circle
- Congruent Figures
Identify congruent figures
- Bilateral and Rotational Symmetry
Identify figures that have bilateral and rotational symmetry
- Angles
Know the definitions of a right angle, an acute angle, and an obtuse angle. Understand that 90° , 180° , 270° , and 360° are associated, respectively, with $1/4$, $1/2$, $3/4$, and full turns
- Understanding Geometric Solids

Visualize, and describe geometric solids, (e.g., prisms, pyramids) in terms of the number and shape of faces, edges, and vertices

- **Creating Geometric Solids**
Make models of geometric solids; interpret two-dimensional representations of three-dimensional objects; draw patterns (of faces) for a solid that, when cut and folded, will make a model of the solid
- **Triangle Definitions and Attributes**
Know the definitions of different triangles (e.g., equilateral, isosceles, scalene) and identify their attributes
- **Quadrilateral Definitions**
Know the definition of different quadrilaterals (e.g., rhombus, square, rectangle, parallelogram, trapezoid)

Statistics, Data Analysis, and Probability

- **Creating and Representing Surveys**
Formulate survey questions; systematically collect and represent data on a number line; and coordinate graphs, tables, and charts
- **Categorical and Numerical Data Sets**
Identify the mode(s) for sets of categorical data and the mode(s), median, and any apparent outliers for numerical data sets
- **Answering Questions Using Data Graphs**
Interpret one-and two-variable data graphs to answer questions about a situation
- **Representing All Possible Outcomes**
Represent all possible outcomes for a simple probability situation in an organized way (e.g., tables, grids, tree diagrams)
- **Expressing Outcomes**
Express outcomes of experimental probability situations verbally and numerically (e.g., 3 out of 4; $\frac{3}{4}$)

Mathematical Reasoning

- **Analyzing Problems**
Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns
- **Simplifying Problems**
Determine when and how to break a problem into simpler parts
- **Verifying Results by Estimation**
Use estimation to verify the reasonableness of calculated results
- **Applying Strategies and Results**
Apply strategies and results from simpler problems to more complex problems
- **Explain Your Reasoning**
Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning
- **Expressing Solutions**

Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work

- Estimation
Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy
- Results That Make Sense
Make precise calculations and check the validity of the results from the context of the problem; evaluate the reasonableness of the solution in the context of the original situation
- Applying Knowledge
Note the method of deriving the solution and demonstrate a conceptual understanding by solving similar problems; develop generalizations of the results obtained and apply them in other circumstances

Grade Four Science

Physical Sciences

- Building Electrical Circuits
Students know how to design and build simple series and parallel circuits by using components such as wires, batteries, and bulbs
- Making and Using A Compass
Students know how to build a simple compass and use it to detect magnetic effects, including Earth's magnetic field
- Electromagnetism
Students know electric currents produce magnetic fields and know how to build a simple electromagnet
- The Use of Electromagnets
Students know the role of electromagnets in the construction of electric motors, electric generators, and simple devices, such as doorbells and earphones
- Electrical Polarity
Students know electrically charged objects attract or repel each other
- Magnetic Polarity
Students know that magnets have two poles (north and south) and that like poles repel each other while unlike poles attract each other
- Converting Electrical Energy
Students know electrical energy can be converted to heat, light, and motion

Life Sciences

- Plants in the Food Chain
Students know plants are the primary source of matter and energy entering most food chains
- Producers and Consumers

Students know producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs and may compete with each other for resources in an ecosystem

- **Decomposers**
Students know decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals
- **Characterizing Ecosystems**
Students know ecosystems can be characterized by their living and nonliving components
- **Survival in an Ecosystem**
Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all
- **Interdependency of Plants and Animals**
Students know many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter
- **Microorganisms**
Students know that most microorganisms do not cause disease and that many are beneficial

Earth Sciences

- **Rocks and the Rock Cycle**
Students know how to differentiate among igneous, sedimentary, and metamorphic rocks by referring to their properties and methods of formation (the rock cycle)
- **Rock-Forming Minerals**
Students know how to identify common rock-forming minerals (including quartz, calcite, feldspar, mica, and hornblende) and ore minerals by using a table of diagnostic properties
- **Slow and Rapid Earth Changes**
Students know some changes in the earth are due to slow processes, such as erosion, and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes
- **Rock and Natural Processes**
Students know natural processes, including freezing and thawing and the growth of roots, cause rocks to break down into smaller pieces
- **Earth and Moving Water**
Students know moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt, and mud in other places (weathering, transport, and deposition)

Investigation and Experimentation

- **Observation and Inference**
Differentiate observation from inference (interpretation) and know scientists' explanations come partly from what they observe and partly from how they interpret their observations
- **Scientific Measurement**
Measure and estimate the weight, length, or volume of objects
- **Predictions Based on Cause-and-Effect**
Formulate and justify predictions based on cause-and-effect relationships

- Using Multiple Trials
Conduct multiple trials to test a prediction and draw conclusions about the relationships between predictions and results
- Graphs From Measurements
Construct and interpret graphs from measurements
- Following Written Instructions
Follow a set of written instructions for a scientific investigation

Grade Four Social Studies

Places and Regions in California

- Locations of Places in California and on Earth
Using the coordinate grid system of latitude and longitude
- Map Skills
North and South Poles; the equator and the prime meridian; the tropics; and the hemispheres, using coordinates to plot locations
- Regions of California
Location of state capital and the various regions of California, how characteristics and physical environments of regions - e.g., water, landforms, vegetation, and climate - affect human activity
- California Geography
Locations of the Pacific Ocean, rivers, valleys, and mountain passes and their effects on the growth of towns
- California Communities
Using maps, charts, and pictures - how communities in California vary in land use, vegetation, wildlife, climate, population density, architecture, services, and transportation

Early California History

- California Indians
The major nations, including their geographic distribution, economic activities, legends, and religious beliefs; how they depended on, adapted to, and modified the physical environment by cultivation of land and use of sea resources
- Early Settlements
Early land and sea routes to, and European settlements in, California; exploration of the North Pacific - e.g., by Captain James Cook, Vitus Bering, Juan Cabrillo; the importance of mountains, deserts, ocean currents, and wind patterns
- Spanish Exploration and Colonization of California
Relationships among soldiers, missionaries, and Indians - e.g., Juan Crespi, Junipero Serra, Gaspar de Portola
- Spanish Missions
Mapping of, geographic basis of, and economic factors in the placement and function of the Spanish missions; how the mission system expanded the influence of Spain and Catholicism throughout New Spain and Latin America
- Daily Life

Native and nonnative people who occupied the presidios, missions, ranchos, and pueblos

- Franciscans
Their role in changing the economy of California from a hunter-gatherer economy to an agricultural economy
- Mexican War for Independence
Its effects on Alta California and on the territorial boundaries of North America
- Mexican rule in California
Its attributes, including land grants, secularization of the missions, and the rise of the rancho economy

From the Bear Flag Republic to Statehood

- Locations of Settlements
Mexican settlements in California and other settlements, including Fort Ross and Sutter's Fort
- Travel to California
How and why people traveled to California and the routes they traveled - e.g., James Beckwourth, John Bidwell, John C. Fremont, Pio Pico
- The Gold Rush
Its effects on settlements, daily life, politics, and the physical environment; biographies of John Sutter, Mariano Guadalupe Vallejo, Louise Clapp
- Women
The women who helped build early California - e.g., Biddy Mason
- Statehood
How California became a state and how its new government differed from those during the Spanish and Mexican periods

Transformation of California Since the 1850's

- Transportation and Communication
The story and lasting influence of the Pony Express, Overland Mail Service, Western Union, and the building of the transcontinental railroad, including the contributions of Chinese workers to its construction
- Gold Rush
How it transformed the economy of California, including the types of products produced and consumed; changes in towns - e.g., Sacramento, San Francisco; economic conflicts between diverse groups of people
- Immigration and Migration to California Between 1850 and 1900
The diverse composition of those who came; the countries of origin and their relative locations; conflicts and accords among the diverse groups - e.g., the 1882 Chinese Exclusion Act
- Growth in the 20th Century
Rapid American immigration, internal migration, settlement, and the growth of towns and cities - e.g., Los Angeles
- Change During the 1930s and 1940s
Effects of the Great Depression, the Dust Bowl, and World War II on California

- New Industries
Development and locations of new industries since the nineteenth century, such as the aerospace industry, electronics industry, large-scale commercial agriculture and irrigation projects, the oil and automobile industries, communications and defense industries; important trade links with the Pacific Basin
- California's Water System
Evolution of the network of dams, aqueducts, and reservoirs
- Education
History and development of California's public education system, including universities and community colleges
- Arts and Culture
Impact of twentieth-century Californians on the nation's artistic and cultural development, including the rise of the entertainment industry; Louis B. Meyer, Walt Disney, John Steinbeck, Ansel Adams, Dorothea Lange, John Wayne

Structures and Powers of Government

- U.S. Constitution
What is and why it is important; written document that defines the structure and purpose of the U.S. government and describes the shared powers of federal, state, and local governments
- California Constitution
Purpose, key principles, relationship to the U.S. Constitution
- Federal, state, and local governments
Similarities - e.g., written documents, rule of law, consent of the governed, three separate branches - and differences - e.g., scope of jurisdiction, limits on government powers, use of the military
- State governments
Structures, functions, roles and responsibilities of their elected officials
- California's governance structure
Components - e.g., cities and towns, Indian rancherias and reservations, counties, school districts

Grade Four Health

Health / Safety Methods

- Car Safety
- Biking Safety
- Preventing Water Accidents
- Fire Safety
- Universal Precautions

Influence on Health from Others

- Peer Pressure
- Media
- Advertising

Basic Body Systems and Their Functions

- Circulatory System
- Respiratory System
- Nervous System

Causes and Consequences of Conflict

- Bullying
- Family Problems
- Possessiveness
- Jealousy

Positive Verbal and Nonverbal Communication Skills

- Family Communication
- Polite Conversation
- Attentive Listening
- Body Language
- Decision Making

Relationships as a Learning Experience

- Friendship
- Romance
- Respecting the Opposite Sex

Practical Psychology

- Attraction
- Compliance
- Persuasion

Guilt

- As an Emotion

- Causes
- Collective Guilt
- Dealing with Guilt

Bullying

- Social Exclusion
- Internalizing Negative Feelings

Equality in Relationships

- Personal Qualities
- Developing Relationships and Sharing Equally

Grade Four Manners

Basic Manners

- Opening doors for others
 - When entering buildings, open the door for other people and allow them to enter first
 - When preceding others into a building, do not let the door slam shut so they must reopen it; hold the door open until the person behind can grab it
 - Show appreciation when a door is opened for you
- Appropriate room entering/exiting
 - If people are exiting a room or building while you are entering, allow them to exit first
 - In elevators, also allow those in the elevator to exit before entering
- Respecting differences
 - Recognize and appreciate differences in behaviors due to culture, race or religion
 - Accept that all families have their own traditions or rituals and do not put down those who are different from you

Grade Four Character Development

Character Study

- What is a conscience?

Know the definition of conscience: the moral sense of right and wrong, chiefly as it affects one's own behavior

- What is consciousness?

Understand the concept of consciousness: [awareness](#); the executive control system of the mind and thought

Learning the Traits

- Faith

Know the definition of faith: confidence that actions rooted in good character will yield the best outcome, even when outcomes cannot be predicted.

- Freedom

Know the definition of freedom: the capacity to exercise choice; free will.

Understand that personal freedom brings benefits and drawbacks; requires sacrifice and commitment.

Character in Action

- Recognizing character through behavior

Examples of key character traits:

Freedom: Discussion Topic – What do you consider your personal freedoms? What choices do you make completely on your own?

Faith: A man helps a stranger who has dropped her bag of groceries – why did he help this woman he did not know and would likely never see again?

Grade Four Interpersonal Relationships

Sibling Relationships

- Sibling relationships play a significant role in shaping lifelong behaviors and roles. Sibling relationships often introduce first experiences with:
 - Fighting
 - Reconciling
 - Cooperating
 - Manipulating

- Comparing
- Competing
- Sibling rivalry (competition between siblings) is very common in families for the following reasons:
 - Evolving needs – changing needs, insecurities and identities can impact sibling relationships
 - Individual personalities – differences in mood, disposition and adaptability affect how well siblings get along
 - Special needs – one sibling may require additional attention due to illness or disability and other siblings may react negatively out of fear or jealousy
 - Role models – how parents resolve problems sets an example for how siblings work through their own conflicts
- Sibling communication strategies include:
 - Ask your sibling questions about themselves (hobbies, interests, etc.); listen
 - Be kind and accepting of your sibling's differences
 - Only offer advice to your sibling if they ask for it
 - Share memories together and respect your sibling's recollection of these events, even if they do not mirror your own
 - Apologize to your sibling for wrongdoings; accept your sibling's apologies as well
 - Remember birthdays and other important events
 - Allow your sibling to share their own news with other family members
 - Offer and accept help in hard times

Grade Four Health & Wellness

Hygiene

- What is hygiene?

Hygiene is a condition promoting sanitary practices; personal hygiene refers to one's level of cleanliness.

- Bathing

Frequent bathing washes off bacteria and viruses on the skin that can cause illness or odor; individuals should take a bath or shower daily as well as directly after physical activity.

- Hand washing

Frequent hand washing is one of the most critical aspects of personal hygiene as it is one of the most effective preventions against diseases.

Hand washing should be done at all of the following times:

- After using the bathroom
 - After changing a diaper
 - After handling pet waste
 - After shaking someone's hand
 - Before you eat
 - Before preparing food
 - After handling dirty laundry
 - After using or discarding a tissue
- Dental care

Teeth and gums play an important part in overall health and must be cleaned on a daily basis; dental care prevents tooth decay, loss of teeth, gum disease and bad breath; individuals should brush teeth twice a day and floss once a day.

Safety

- What is safety? Why is it important?

Safety is the state of being certain that adverse effects will not be caused by some agent under defined conditions; safety is important because it aids in injury prevention and promotes overall well being.

Basic safety tips:

- Obey local laws and warnings
- Do not play with fire
- Prevent tripping hazards (remove clutter from walking paths to prevent falls)
- Have your vision checked
- Make sure an adult supervises play
- Use age-appropriate equipment

Bicycle safety tips:

- Wear a properly fitting helmet
- Ensure bike wheels are fully inflated and bike is in working condition

- Wear brightly colored clothing
- Use reflective stickers or patches if riding at night
- Stay alert and aware of surroundings
- Ride on the right side of the road with the flow of traffic

Grade Four Study Skills

The Importance of Study Skills

- What are study skills?

Learned abilities that enable students to successfully manage the demands of school

- Benefits of study skills:
 - An understanding of personal learning style
 - Ability to make positive choices about schooling
 - Retention of effective study strategies
 - Greater control over school performance and progress
 - Increased enjoyment for school and learning

Organizational Skills

- Why is organization important in school?

Being organized saves time; disorganized students often waste a lot of time searching for assignments and materials

- Advance preparation
Begin the organization process on the first day of school; make a list of required materials that will be needed for your classes

Tips for getting organized:

- Keep a homework log (even if your teachers do not require it) – record assignments completely in the log
- Keep a log of friends' phone numbers – ensure you have at least two classmates' phone numbers so you can ask questions about assignments in case you are unsure or absent
- Keep a travel folder (a two-pocket folder) – label one side "To Do" for homework, permission slips, or other items that need to go home with you; label the other side "Done" to hold completed assignments, signed papers or other messages that need to return to school
- Keep your backpack in the same place at your home – this will eliminate time spent searching for materials

- Keep an organized notebook – take time to label and section off your work materials so you can easily find information

Study Patterns

- It is important to have consistent study patterns at home including a study schedule and study environment.

Tips for an effective study schedule:

- Study frequently, for shorter periods of time (four half-hour sessions are better than one two-hour session)
- Study most difficult subject early in study session
- Review class notes each night – record questions to ask, observations, etc.
- Organize materials for the following day – file papers, check calendar, etc.

Tips for an effective study environment:

- Sufficient, uncluttered workspace
 - Adequate lighting
 - Comfortable temperature
 - Seat that supports back and eliminates muscle strain
 - Limited distractions (visual or audible)
- Students should engage in active study strategies to increase their retention of material; these strategies might include speaking, writing, simulating, drawing and manipulating content so that it makes the most sense.

Examples of study strategies:

- Describe or explain aloud a topic in your own words
- Teach the information to someone else (or record it)
- Role-play a part
- Write out review cards on a topic (special vocabulary, main ideas, etc.)
- Categorize information in lists
- Draw a diagram, map or chart to demonstrate the information in a graphic form
- Develop your own questions based on what you anticipate would be on a test

- Visualize a scene, character or event related to topic
- Create a mnemonic to remember information

Example: for order of operation in an equation – Please Excuse My Dear Aunt Sally–
Parenthesis-Exponent-Multiply-Divide-Add-Subtract

Fifth Grade

Free World U

Grade Five Language Arts

Grammar

- Adjectives and Adverbs
A review to help students identify and use these modifiers
- Nouns as Adjectives
How to recognize them and use them properly
- Prepositions
More practice in locating and using prepositions
- Dependent Clauses
Explains the clause, and conjunctions; students practice usage
- Writing Numbers
When to spell them out, when to use hyphens and when to use numerals
- Gerunds
Introduction to gerunds
- Verbals
Verbals, participial phrases, infinitives
- Appositives
Introduction to appositives
- Irregular Verbs
Lay/lie, sit/set, rise/raise, see/saw/seen, go/went/gone

Punctuation

- Commas
With independent clauses and introductory elements
- Semi-colons
To separate independent clauses, items in a series, and separating complex clauses
- Quotation Marks
Around the words of a speaker, lines of poetry, and titles of poems, songs, and short stories
- Colons
Using colons to introduce a list, provide clarification, and to separate hours from minute

Writing Sentences

- Compound-Complex Sentences
What are compound-complex sentences? Identify and use them correctly
- Comma Splices and Fused Sentences
Students identify and correct these common errors

- Writing Concise Sentences
Reviewing subjects, verbs, pronouns, descriptive words; eliminating unnecessary words and overused phrases
- Capitalization Review
Students find and correct errors in capitalization while reviewing rules
- Editing Your Sentences
Basic editing tips

Writing Paragraphs

- Expository, Persuasive, and Descriptive Writing
Thesis statement and examples of three types of writing: expository, persuasive, and descriptive; putting sentences in the right order and identifying cause and effect
- Transitional Words
Using transitions to show proper order or comparisons/contrasts between ideas
- Using Varied Sentences
Creating interesting sentences by moving modifiers, using transitions, and combining sentences
- Revising for Consistency
Editing writing for consistency
- Penmanship
Student demonstrates legible cursive or italic handwriting

Writing Essays

- Parts of an Essay
The essay-writing process; showing how to develop ideas and create transitions between paragraphs
- Choosing a Topic
Researching and choosing a topic of appropriate weight for a 500-word chronological essay
- Outlining an Essay
How to organize your thoughts into an outline
- Writing from Your Outline
How to follow the outline step-by-step to write an essay; how to use the essay to see where to end and begin new paragraphs
- Revising Your Essay
How to edit their work, including looking for consistency and coherency problems and adding strong verbs and descriptive words; read the essay aloud and look at each sentence individually for problems
- Your Turn: Write an Essay
Student demonstrates ability to choose a topic for an essay, write a thesis statement and opening paragraph, develop his 500-700 word essay, and write a closing paragraph. Students revise the work before submitting it. The essay is to be organized in chronological order

- Your Turn: Write a Comparison
Students write an essay comparing or contrasting two people, places, or things. Essay should have a thesis statement, supporting paragraphs, and a concluding paragraph. Students will be reminded to use details and varied sentences. Students will revise their work

Storytelling

- The Plot
How to develop a story with an interesting plot
- The Main Character
How to create an interesting character
- The Setting
Simple explanation of setting. Students will build on their storytelling knowledge and abilities throughout middle school
- Your Turn: Write a Story
Students may choose either a true, personal tale, or a made-up story which they create

Writing Letters

- Types of Letters
Proper form and tone for business and personal letters
- Determining Purpose for Writing
Sticking to the point
- Addressing Your Audience
To whom are you writing? What is the proper tone?
- Using Correct Letter Formats
Discussion includes block and indented formats, as well as explanation of margins, paragraphs, greeting, and closing
- Addressing the Envelope
Shows students what goes where
- Your Turn: Write a Persuasive Letter
Assignment to student is to write a persuasive formal letter to the principal of a fictitious school to make a respectful request for a change or improvement. Student should state a clear position, give evidence to support his idea, and address any obvious objections that a reader is likely to have

Reading Literature

- Sequence
The sequence of events in fairy tales and science fiction writing
- Plot Summaries and Plot Outlines
Again looking at fairy tales and science fiction, we examine how writers plot out the action of a story
- Identifying Themes in Fiction
Grade-level discussion of finding the theme by careful reading and consideration of the plot, characters, and setting

- Read a Novel
Students read the novel and answer questions about theme, character development and motivation, plot, sequence, conflict and resolution etc
- Comparing Two Stories
Students read two short stories and compare and contrast the characters, their motives, the culture, and the various techniques used by the author, including symbolism, use of figurative language, etc
- Sayings
Put the cart before the horse. Catch 22. The whole nine yards.
- Reading Aloud
Student demonstrates ability to read aloud grade-level text with proper pacing, intonation, and expression

Poetry

- Introduction to Poetry in American Literature
Introduces students to such poets as Ralph Waldo Emerson, Henry Wadsworth Longfellow, Langston Hughes and Maya Angelou, among others
- Themes in American Poetry
Tracks poetic responses to historical events such as westward expansion, rise of industrialization, and the civil rights movement
- Hyperbole
Introduction and examples
- Assonance and Alliteration
Introduction to assonance and review of alliteration
- Symbolism and Metaphor
Practice identifying and understanding these devices
- Your Turn
Students create and submit their own poem
- Reading Poetry
Student reads aloud, demonstrating proper intonation and rhythm

Reading for Information

- Reading the Newspaper
Students read an informational article and determine the main idea, supporting ideas, and other pertinent information using the text and accompanying graphics
- Reading Charts and Graphs
Students practice finding information in charts and graphs
- Fact vs. Opinion
Students are challenged to determine which is which in grade-level sentences and paragraphs

- Reading Articles: Reading an Article
Students read several informational magazine-style articles. They locate the main idea and identify and assess the evidence that supports the main idea in each article. Students should be able to use their own knowledge and the information in the text to determine whether the articles make sense and are well documented

Vocabulary

- Latin Roots and Affixes
Extensive lesson trains students to identify and decipher roots and affixes
- Using Context Clues
Extensive practice in using context clues to decipher meaning
- Vocabulary A-C
- Vocabulary D-J
- Vocabulary K-R
- Vocabulary S-Z

Spelling

- Reviewing the Rules
Student demonstrates ability to properly spell words with prefixes, suffixes, and contractions
- Write it Right
Review of commonly misspelled words such as there/their/they're, it's/its, etc. Includes commonly mixed-up homophones such as real/reel, right/write, principal/principle, banned/band, etc

Research and Technology

- Finding More Information
Using citations, end notes, and bibliographic references to find more information on a topic
- Using a Thesaurus
Using a thesaurus to find antonyms and synonyms to liven up writing; choosing the right word from the thesaurus' list
- Using Spell Check
How to use spell check, how to add words to the spell check dictionary, why you can't always rely on spell check
- Searching Online
Using a search engine, choosing a source, determining if a source is reliable, navigating a web site using pull down menus, internet safety
- What's the best source?
Select trustworthy sources and learn to identify unreliable ones

Listening

- Listening to a Report
Listen to an oral report and answer questions, demonstrating understanding of the speaker's purpose and the information presented; draw conclusions about the information presented
- Advertising Claims
Listen to radio-style advertisements and read newspaper-style ads and learn to identify the persuasive techniques, such as promises, glittering generalities, flattery, and bandwagon approach, therein

Speaking

- Writing a Speech
Students are reminded to select a focus, organizational structure, and point of view. They learn to support their ideas with evidence and examples
- Using Note Cards
Using cards as a prompt in speech-giving
- Your Turn: Telling a story
Students prepare and deliver a narrative speech that describes an event. Speech can be about something personal or tell a story that happened to someone else, such as Lindberg's flight across the Atlantic. Emphasis is on description, showing the listener what happened, not telling, and on a solid beginning and ending
- Your Turn: Informing the Class
Students deliver a speech about an important idea, issue, or news event. They establish a clear focus and develop the topic with facts, details, examples, and/or explanations
- Your Turn: Talking about Literature
Students read and summarize the main events in a literary work. They discuss theme and character development and use examples from the work to support their conclusions about the themes and character development

Grade Five Math

Number Sense

- Large and Small Numbers
Estimate, round, and manipulate very large (e.g., millions) and very small (e.g., thousandths) numbers
- Finding Percents
Interpret percents as a part of a hundred; find decimal and percent equivalents for common fractions and explain why they represent the same value; compute a given percent of a whole number
- Exponents
Understand and compute positive integer powers of nonnegative integers; compute examples as repeated multiplication
- Prime Factors
Be able to determine the prime factors for numbers up to 50 and express the numbers as the product of their prime factors by using exponents to show multiples of a factor

- Using Number Lines
Identify and represent decimals, fractions, mixed numbers, positive integers and negative integers on a number line

Decimals and Fractions

- Manipulating Decimals
Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results
- Proficiency With Division
Demonstrate proficiency with division, including division with positive decimals and long division with multidigit divisors
- Fractions and Mixed Numbers
Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form
- Multiplication and Division of Fractions
Understand the concept of multiplication and division of fractions; compute and perform simple multiplication and division of fractions and apply these procedures to solving problems

Algebra and Functions

- Solutions Using Graphs
Use information taken from a graph or equation to answer questions about a problem situation
- Using Variables
Use a letter to represent an unknown number; write and evaluate simple algebraic expressions in one variable by substitution
- Distributive Property With Variables
Know and use the distributive property in equations and expressions with variables
- Ordered Pairs
Identify and graph ordered pairs in the four quadrants of the coordinate plane; Know how to write ordered pairs correctly; for example, (x, y)
- Solving and Graphing Equations
Solve problems involving linear functions with integer values; write the equation; and graph the resulting ordered pairs of integers on a grid

Measurement and Geometry

- Basic Formulas for Area
Use formulas to see that two of the same triangles make a parallelogram with twice the area; a parallelogram is compared with a rectangle by cutting and pasting a right triangle on the parallelogram
- Surface Area of 3-D Objects
Construct a cube and rectangular box from two-dimensional patterns and use these patterns to compute the surface area for these objects

- Volume
Understand the concept of volume and use the appropriate units in common measuring systems (i.e., cubic centimeter, cubic meter, cubic inch, cubic yard) to compute the volume of rectangular solids
- Measuring 2-D and 3-D Objects
Differentiate between, and use appropriate units of measures for, two-and three-dimensional objects (i.e., find the perimeter, area, volume)
- Using Mathematical Tools
Measure, identify, and draw angles, perpendicular and parallel lines, rectangles, and triangles by using appropriate tools (e.g., straightedge, ruler, compass, protractor, drawing software).
- Common Angles
Know that the sum of the angles of any triangle is 180 degrees and the sum of the angles of any quadrilateral is 360 degrees and use this information to solve problems
- Visualizing Shapes
Visualize and draw two-dimensional views of three-dimensional objects made from rectangular solids

Statistics, Data Analysis, and Probability

- Mean, Median and Mode
Know the concepts of mean, median, and mode; compute and compare simple examples to show that they may differ
- Displaying Data on Graphs
Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets
- Comparing Data Sets
Use fractions and percentages to compare data sets of different sizes
- Interpreting Data Sets
Identify ordered pairs of data from a graph and interpret the meaning of the data in terms of the situation depicted by the graph

Mathematical Reasoning

- Analyzing Problems
Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns
- Simplifying Problems
Determine when and how to break a problem into simpler parts
- Verifying Results by Estimation
Use estimation to verify the reasonableness of calculated results
- Applying Strategies and Results
Apply strategies and results from simpler problems to more complex problems
- Explain Your Reasoning
Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning

- **Expressing Solutions**
Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work
- **Estimation**
Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy
- **Results That Make Sense**
Make precise calculations and check the validity of the results from the context of the problem; evaluate the reasonableness of the solution in the context of the original situation
- **Applying Knowledge**
Note the method of deriving the solution and demonstrate a conceptual understanding by solving similar problems; develop generalizations of the results obtained and apply them in other circumstances

Grade Five Science

Physical Sciences

- **Atoms**
Students know all matter is made of atoms, which may combine to form molecules
- **Atoms in Chemical Reactions**
Students know that during chemical reactions the atoms in the reactants rearrange to form products with different properties
- **Metals**
Students know metals have properties in common, such as high electrical and thermal conductivity. Some metals, such as aluminum (Al), iron (Fe), nickel (Ni), copper (Cu), silver (Ag), and gold (Au), are pure elements; others, such as steel and brass, are composed of a combination of elemental metals
- **Elements**
Students know that each element is made of one kind of atom and that the elements are organized in the periodic table by their chemical properties
- **Images of Atoms and Molecules**
Students know scientists have developed instruments that can create discrete images of atoms and molecules that show that the atoms and molecules often occur in well-ordered arrays
- **Mixtures and Compounds**
Students know differences in chemical and physical properties of substances are used to separate mixtures and identify compounds
- **Properties of Substances**
Students know properties of solid, liquid, and gaseous substances, such as sugar ($C_6H_{12}O_6$), water (H_2O), helium (He), oxygen (O_2), nitrogen (N_2), and carbon dioxide (CO_2)
- **Elemental Compositions**
Students know living organisms and most materials are composed of just a few elements

- Salts
Students know the common properties of salts, such as sodium chloride (NaCl)

Life Sciences

- Structures for Transporting Materials
Students know many multicellular organisms have specialized structures to support the transport of materials
- Blood Circulation
Students know how blood circulates through the heart chambers, lungs, and body and how carbon dioxide (CO₂) and oxygen (O₂) are exchanged in the lungs and tissues
- Digestion
Students know the sequential steps of digestion and the roles of teeth and the mouth, esophagus, stomach, small intestine, large intestine, and colon in the function of the digestive system
- Removing Cellular Waste
Students know the role of the kidney in removing cellular waste from blood and converting it into urine, which is stored in the bladder
- Plant Circulation
Students know how sugar, water, and minerals are transported in a vascular plant
- Plant Processes
Students know plants use carbon dioxide (CO₂) and energy from sunlight to build molecules of sugar and release oxygen
- Sugar Energy
Students know plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO₂) and water (respiration)

Earth Sciences

- Salt Water
Students know most of Earth's water is present as salt water in the oceans, which cover most of Earth's surface
- Water Properties
Students know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water
- Water Vapor
Students know water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall to Earth as rain, hail, sleet, or snow
- Water Quantities
Students know that the amount of fresh water located in rivers, lakes, under-ground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water
- Water Origins
Students know the origin of the water used by their local communities

- Convection Currents
Students know uneven heating of Earth causes air movements (convection currents)
- Weather and the Water Cycle
Students know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns
- Severe Weather
Students know the causes and effects of different types of severe weather
- Weather Maps and Forecasts
Students know how to use weather maps and data to predict local weather and know that weather forecasts depend on many variables
- Atmospheric Pressure
Students know that the Earth's atmosphere exerts a pressure that decreases with distance above Earth's surface and that at any point it exerts this pressure equally in all directions
- The Sun
Students know the Sun, an average star, is the central and largest body in the solar system and is composed primarily of hydrogen and helium
- Our Solar System
Students know the solar system includes the planet Earth, the Moon, the Sun, eight other planets and their satellites, and smaller objects, such as asteroids and comets
- Planetary Orbits
Students know the path of a planet around the Sun is due to the gravitational attraction between the Sun and the planet

Investigation and Experimentation

- Classifying Objects
Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria
- Choosing a Testable Question
Develop a testable question
- Simple Investigations
Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure
- Identifying Variables
Identify the dependent and controlled variables in an investigation
- Collecting Information from Variables
Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment
- Using Scientific Tools
Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations
- Recording and Inference
Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data

- Drawing Conclusions
Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion
- Reporting Findings
Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions

Grade Five Social Studies

Major Pre-Columbian Settlements

- Influence of Geography and Climate
Cliff dwellers and Pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River; how various nations lived and adjusted to the natural environment; locations of villages; distinct structures that they built; how they obtained food, clothing, tools, and utensils
- Traditions
Varied customs and folklore traditions of cliff dwellers and Pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River
- Varied Economies and Systems of Government
Economies and systems of government of major pre-Columbian American Indian groups, including cliff dwellers and Pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River

Early Explorations of the Americas

- Entrepreneurial Characteristics of Early Explorers
Christopher Columbus, Francisco Vázquez de Coronado
- Technological Developments in Sea Exploration
e.g., compass, sextant, astrolabe, seaworthy ships, chronometers, gunpowder
- Aims, Obstacles, and Accomplishments of the Explorers
Their sponsors; leaders of key European expeditions; reasons Europeans chose to explore and colonize the world - the Spanish Reconquista, the Protestant Reformation, the Counter Reformation
- Routes of the Major Land Explorers of the United States
Distances traveled by explorers; Atlantic trade routes that linked Africa, the West Indies, the British colonies, and Europe
- Land Claims
Locate on maps of North and South America land claimed by Spain, France, England, Portugal, the Netherlands, Sweden, and Russia

American Indians' Cooperation and Conflict

- Competition
English, French, Spanish, Dutch, and Indian nations compete for control of North America

- Cooperation
Between the colonists and Indians during the 1600s and 1700s - e.g., in agriculture, the fur trade, military alliances, treaties, cultural interchanges
- Conflicts
Before the Revolutionary War - the Pequot and King Philip's Wars in New England, the Powhatan Wars in Virginia, the French and Indian War
- Defeat of the Indians
Role of broken treaties and massacres; factors that led to the Indians defeat, including the resistance of Indian nations to encroachments and assimilation; the Trail of Tears
- Internecine Indian Conflicts
Competing claims for control of lands - e.g., actions of the Iroquois, Huron, Lakota Sioux
- Significant Leaders of the Time
Influence and achievements - e.g., John Marshall, Andrew Jackson, Chief Tecumseh, Chief Logan, Chief John Ross, Sequoyah

Institutions in the Colonial Era

- Location and Physical Setting
Influence on the founding of the original 13 colonies; identify on map the locations of the colonies and of the American Indian nations already inhabiting these areas
- Major Individuals and Groups
Those responsible for the founding of the various colonies; the reasons for their founding; John Smith, Virginia; Roger Williams, Rhode Island; William Penn, Pennsylvania; Lord Baltimore, Maryland; William Bradford, Plymouth; John Winthrop, Massachusetts
- Religious Aspects of the Earliest Colonies
Puritanism in Massachusetts, Anglicanism in Virginia, Catholicism in Maryland, Quakerism in Pennsylvania
- First Great Awakening
Its significance; leaders; how it marked a shift in religious ideas, practices, and allegiances in the colonial period; the growth of religious toleration and free exercise of religion
- British, Spanish, and French Colonial Systems
Differences between the systems; how the British colonial period created the basis for development of political self-government and a free-market economic system
- Slavery
Its introduction into America; responses of slave families to their condition; the ongoing struggle between proponents and opponents of slavery; the gradual institutionalization of slavery in the South
- Early Democratic Ideas and Practices
How and where they emerged during the colonial period; significance of representative assemblies and town meetings

Causes of the American Revolution

- Political, Religious, and Economic Ideas and Interests
How they brought about the Revolution - e.g., resistance to imperial policy, the Stamp Act, the Townshend Acts, taxes on tea, Coercive Acts

- Leading Up to the Revolution
Significance of the first and second Continental Congresses and of the Committees of Correspondence
- Declaration of Independence
People and events associated with its drafting and signing; the document's significance, including the key political concepts it embodies, the origins of those concepts, and its role in severing ties with Great Britain
- Key Individuals
Views, lives, and impact of King George III, Patrick Henry, Thomas Jefferson, George Washington, Benjamin Franklin, John Adams

Course and Consequences of the Revolution

- Key People and Events
Identify and map the major military battles, campaigns, and turning points of the Revolutionary War; roles of the American and British leaders; Indian leaders' alliances on both sides
- Important Contributions
Contributions of France and other nations and of individuals to the outcome of the Revolution; Benjamin Franklin's negotiations with the French; the French navy; the Treaty of Paris; The Netherlands; Russia; the Marquis Marie Joseph de Lafayette; Tadeusz Kościuszko; Baron Friedrich Wilhelm von Steuben
- Roles of Women During the Revolution
Abigail Adams, Martha Washington, Molly Pitcher, Phillis Wheatley, Mercy Otis Warren
- Hardships
Personal impact and economic hardship of the war on families; problems of financing the war; wartime inflation; laws against hoarding goods and materials and profiteering
- State Constitutions
How those established after 1776 embodied the ideals of the American Revolution and helped serve as models for the U.S. Constitution
- Land Policies
Significance of land policies developed under the Continental Congress - e.g., sale of western lands, the Northwest Ordinance of 1787; policies' impact on American Indians' land
- Slavery
How the ideals set forth in the Declaration of Independence changed the way people viewed slavery

The U.S. Constitution and its Significance

- Articles of Confederation
its shortcomings of the as set forth by their critics
- Constitution of 1787
its significance, including the struggles over its ratification and the reasons for the addition of the Bill of Rights
- Fundamental Principles
American constitutional democracy; how the government derives its power from the people and the primacy of individual liberty

- Separation of Powers
how the Constitution is designed to secure our liberty by both empowering and limiting central government; compare the powers granted to citizens, Congress, the president, and the Supreme Court with those reserved to the states
- Safeguarding Liberty
American creed that calls on citizens to safeguard the liberty of individual Americans within a unified nation, to respect the rule of law, and to preserve the Constitution
- Songs that Express American Ideals
"America the Beautiful," "The Star Spangled Banner"

America from 1789 to the Mid-1800's

- Immigration
Waves of immigrants from Europe between 1789 and 1850; their modes of transportation into the Ohio and Mississippi Valleys and through the Cumberland Gap - e.g., overland wagons, canals, flatboats, steamboats
- States and Territories
Names of those that existed in 1850; their locations; major geographical features - mountain ranges, principal rivers, dominant plant regions
- Exploration
Explorations of the trans-Mississippi West following the Louisiana Purchase - e.g., Meriwether Lewis and William Clark, Zebulon Pike, John Fremont
- Overland Trails to the West
Experiences of settlers; location of the routes; purpose of the journeys; the influence of the terrain, rivers, vegetation, and climate; life in the territories at the end of these trails
- Mexican Settlers
Continued migration into Mexican territories of the West and Southwest
- Expansion
How and when California, Texas, Oregon, and other western lands became part of the United States; significance of the Texas War for Independence and the Mexican-American War

States and Their Capitals

- Location
Current 50 states
- Capitals
Current 50 states

Grade Five Health

Early Detection and Treatment of Illness

- Prevention and Reduction of Infectious Illness
- Communicable and Non-Communicable Diseases

- Immunizations

Relationship Between Environment and Individual Health

- Pollution and Respiration
- Sun and Skin Cancer
- Water

Positive and Negative Effects of Health Related Actions on Body Systems

- Drug Use
- Exercise
- Diet

Factors Affecting Growth and Development

- Physical Factors
- Mental Factors
- Social and Cultural Factors

Using Refusal Skills in Necessary Situations

- Pressure to Use Drugs
- Pressure to Join Gangs
- Physical Abuse and Exploitation

Getting Hurt in Dating Situations

- Meeting Online
- Age Difference in Relationship
- Seeing People for Who They Are, Not What You Want Them to Be

Normal Growth and Development of Relationships

- Families
- Friendship
- Loving, Liking, and Caring

Shame

- Shame vs. Embarrassment
- Shame vs. Guilt

- Toxic Shame

Gang Resistance

- Bullying, Victim & Bystander
- Talking to Adults

Bullying

- Using Cyberspace to Bully
- Hurting Self-Confidence
- No Tolerance

Sexual Identity

- Gender Identity
- Gender Role
- Sexual Orientation

Grade Five Manners

Basic Manners

- Introducing yourself
 - Introduce yourself with your full name
 - Extend your right hand for a hand shake
 - Make good eye contact and smile naturally
- Shaking hands
 - Grip the other person's hand, palm to palm, and hold the contact for two or three handshakes
 - Do not grip too tightly or too loosely; find a balance
- Technology manners
 - Cell phone calls (or texts) should never be taken in front of a person you are having a conversation with
 - Silence your phone and continue your conversation
 - In case of an emergency, excuse yourself to take the call and find a hallway or corner to speak on your phone

- Thank you notes
 - Write hand-written thank you notes when you receive a gift or other assistance
- Personal space
 - When speaking with someone, do not stand or sit too closely to the person
 - Keep an arm's length of distance between you and the person you are speaking with

Grade Five Character Development

Character Awareness

- What is “the unconscious”?

Understand the meaning of the unconscious: that part of the mind wherein psychic activity takes place of which the person is unaware.
- Recognize that all humans possess an unconscious mind.

How are our unconscious minds formed?

Experiences, memories, impressions from our past – many of these instances are not consciously remembered.

Example of unconscious behavior:

Breathing – you normally do not *think* about your breathing – it becomes controlled by your unconscious. When you focus on your breathing, however, (probably like you are doing now) it becomes part of your conscious mind.
- Where do you stand in your own personal development?

“Map of Consciousness” was developed by Dr. David Hawkins to measure levels of consciousness – Hawkins’ book *Transcending the Levels of Consciousness* examines this subject. The map provides a framework for conscious living, enabling individuals to identify their own level of consciousness and recognize higher levels to promote greater personal growth.

Levels of Awareness

- Shame/Guilt

Shame and guilt are the lowest levels of personal awareness. At these levels, individuals feel self-hatred and cannot forgive themselves for their past mistakes and failures.
- Apathy

Apathy is a level characterized by feelings of hopelessness and helplessness. At this level, individuals feel like victims.

Character in Action

- Shame/Guilt: These levels are very destructive to emotional and physical health. Effects include feelings of remorse, depression, even suicide. This level can sometimes bring on accident proneness, rage and the potential to harm the self or others.
- Apathy: This level is often seen in people experiencing poverty or despair. Effects include a complete neediness and an inability to secure resources for one's own survival; often can result in passive suicide, if others are not available to support the individual.
- Extend the discussion of these lowest levels of awareness, identifying life situations where people may likely exist at these levels. What are the effects?

Grade Five Interpersonal Relationships

Friendships

- Importance of friendship

Friends bring joy, ease pain and grief, provide strength and foster emotional growth.

True friendships can take two forms:

- Temporary bonds that reach a natural end based on life experiences or personal changes
- Permanent bonds that endure major life changes and bring continuous comfort and support

*Both types of friendships are valuable, providing an important foundation for relationship development and personal growth

- How to find true friends

Develop good listening skills including:

- Genuineness (being sincere and real)
- Acceptance (being agreeable to a situation without attempting to change it)
- Empathy (being able to emotionally share the sadness or happiness of another)

Practice appropriate self-disclosure (revealing information about yourself):

- Identify with others; reveal vulnerabilities
- Open up about yourself; but do not overwhelm another person with boring details
- Do not gossip about others; share your own stories

- How to maintain friendships

Friendships should not be taken for granted; they need to be renewed and nurtured. The following qualities can help keep true friendship alive:

- Loyalty – keep promises, do not tell secrets, do not abandon one another

- Forgiveness – maintain reasonable expectations of one another, overlook minor offenses
- Honesty – be authentic (show your true self to one another); be accepting of the truth
- Dedication – be willing to sacrifice personal time for one another; show commitment

Grade Five Health & Wellness

Obesity

- What is obesity?

Obesity is generally defined as having a body mass index (BMI)* of 30 or higher; this exceeds the BMI levels for overweight individuals at 25-29.9. One in four Americans is obese.

*BMI is a measurement of body fat based on height and weight – BMI calculator is available at: http://www.weightwatchers.com/health/asm/calc_bmi.aspx

- What factors are contributing to the rise in obesity?

- Poor nutrition
- Lack of exercise
- Emotional stress
- Lack of sleep

*A change in these factors can help individuals overcome obesity.

- Dangers of obesity:

Obesity contributes to many health problems including:

- Heart disease
- High blood pressure
- Diabetes
- Cancer
- Emotional distress (poor self-image)

Eating Disorders

- What are eating disorders?

Eating disorders are a group of conditions characterized by abnormal eating habits that may involve insufficient or excessive food intake to the detriment of an individual's physical and emotional health.

- The most common eating disorders are:
 - Binge eating disorder – characterized by consuming large quantities of food and feeling a sense of helplessness about eating habits
 - Anorexia nervosa – characterized by refusal to maintain a healthy body weight and an obsessive fear of gaining weight
 - Bulimia nervosa – characterized by recurrent binge eating followed by purging (self-induced vomiting or excessive use of laxatives)
- Causes of eating disorders
 - Psychological factors – low self-esteem, lack of control, depression, anxiety, anger, loneliness
 - Interpersonal factors – troubled family and personal relationships, difficulty expressing emotions, history of being teased, history of physical or sexual abuse
 - Social factors – cultural pressures that value “thinness” and the “perfect body,” narrow definitions of “beauty,” excessive value on physical appearance
 - Biological factors – chemical imbalances in the brain that control hunger, appetite and digestion, family history of eating disorders
- Treatment for eating disorders

Eating disorders should be diagnosed and treated under the guidance of a doctor – it is important that individuals receive screening for any other medical problems resulting from the disorder.

Treatment options vary based on the individual and the type of eating disorder but often include some combination of the following:

- Psychotherapy – individual and group therapy aimed at exploring the issues underlying the eating disorder and identifying healthier ways to respond to stress and emotions
- Nutritional counseling – dieticians or nutritionists guide individuals in healthy eating patterns including meal plans and dietary goals
- Support groups – groups run by peers with similar disorders offer a safe environment to share experiences and find support
- Residential treatment – residential or hospital-based care may be necessary when the disorder is severe and accompanied by physical or behavioral problems or ongoing medical issues

*To find an eating disorder specialist visit www.nationaleatingdisorders.org
or call 1-800-931-2237

Sleep Disorders

- What are sleep disorders?

A sleep disorder is a disturbance of normal sleep patterns; sleep disorders can be serious enough to interfere with normal physical, mental and emotional functioning.

- Types of sleep disorders

Sleep disorders are typically classified into three major categories including lack of sleep, disturbed sleep and excessive sleep.

- Lack of sleep (insomnia)

Insomnia is the inability to fall asleep; it is a common sleep problem that can disrupt daily life, affecting judgment, reaction-time, coordination, memory and general wellness.

- Causes: insomnia can be caused by poor diet (including excessive caffeine intake), emotional problems, stress, disease and many other factors
- Treatment: short-term insomnia can be treated with sleeping pills; long-term insomnia often requires further medical intervention

- Disturbed sleep (sleep apnea)

Sleep apnea occurs when breathing is interrupted during sleep; it typically occurs because of an underlying problem in the windpipe; it results in loud snoring, gasping or snorting; sufferers of sleep apnea are more susceptible to other medical conditions including heart disease and stroke.

- Causes: sleep apnea can be caused by narrow nasal passages, enlarged tonsils and obesity.
- Treatment: a change in sleeping position, nasal strips or saline drops, singing therapy, lifestyle changes, dental devices, acupuncture and other medical treatments.

- Excessive sleep (narcolepsy)

Narcolepsy is a neurological disorder characterized by disabling sleepiness; most sufferers experience insomnia at bedtime with sudden sleep attacks, muscular weakness and hallucinations during the day.

- Causes: narcolepsy is disorder of the nervous system; it is not related to mental illness; narcolepsy tends to run in families
- Treatment: there is no known cure for narcolepsy; the goal of treatment is to control and minimize symptoms; this is often accomplished through a combination of lifestyle changes and prescription medications

Grade Five Study Skills

Self-Evaluation & Goals

- It is important for students to evaluate their own studying so they can monitor their behavior, identify results and establish goals for learning.
- Keep a learning log/journal to record observations about your learning and schoolwork.

Every week, answer the following questions in your learning log to track progress:

- What have I done to help myself remember information from my reading?
- What are some strategies I can use to study for upcoming tests?
- How can I make my notebook more organized and useful?
- What routines can I incorporate to make my schoolwork easier and more effective?
- What is my goal for next week?

Taking Notes

- Why is it important to take notes?

Note taking improves retention of information by increasing concentration, enabling better organization and by providing material that can be studied at a later time.

- Note taking techniques
 - Leave a wide margin (3 inches) on the left side of the paper for a "Recall Column"
 - In the remaining space, create a "Notes Column"
 - Label notes by date, topic and page
 - Write titles or headings correctly
 - Skip lines between topics
 - Copy all notes off board accurately
 - Circle and underline key phrases
 - Review notes after you have finished recording them
 - Insert main ideas, questions, drawings or problems in the "Recall Column"

Sixth Grade

Free World U

Grade Six Language Arts

Nouns and Verbs

- Nouns
Review of common and proper nouns. Introduction of noun phrases and collective nouns
- Active and Passive Voice Verbs
An introduction to voice; discussion on why a writer might choose one over the other
- Perfect Tense Verbs
An introduction to perfect tense
- Progressive Tense Verbs
An introduction to progressive tense
- Irregular Verbs
Practice using irregular verbs

Punctuation

- Misused Semicolons
Using a semicolon to join independent clauses
- Colons
Review of proper usage
- Hyphens and Dashes
Using hyphens with numbers, fractions, and compound words; using dashes to separate an independent clause that interrupts a sentence
- Parentheses and Brackets
When to use parentheses and brackets
- Abbreviations
Common abbreviations; when to use periods
- Using Commas for Clarification
Annotation
- Using Commas with Nonessential Elements
Interrupters, parenthetical phrases, and direct address

Writing Sentences

- Compound and Complex Sentences
Reviews what they are, why to use them, and how to punctuate them
- Misplaced Modifiers
Students learn to put words in the proper order to create the best sentences
- Awkward Sentences
Students learn to put words in the proper order to create the best sentences

- Subject/Verb Agreement
Covers compound subjects, subjects named by a group noun, indefinite pronouns, and tricky words such as “either” and “neither”
- Faulty Parallelism
Students learn to put words in the proper order to create the best sentences possible
- Incorrect Use of Semicolons, Hyphens, and Colons
Review of proper usage
- Incorrect Use of Commas
Review of proper usage
- Capitalization
Review of the rules
- Using Proofreader’s Marks
Show students how to use common symbols

Writing Phrases

- Appositive Phrases
Identification and practice in usage
- Verbal Phrases
Identification and practice in usage

Writing Paragraphs

- Verb Problems in Paragraphs
Replacing weak verbs; sticking to one tense
- Drawing False Conclusions
Introduction to common fallacies

Reading Nonfiction

- Finding Information
Students locate information in newspapers and magazines and online, using the indexes and tables of contents
- Comparing and Contrasting
Students read comparison-and-contrast articles and answer questions, demonstrating an understanding of the material
- Evaluating an Article
Deciding whether information is believable based on the arguments used by the author and/or the sources
- Outlining an Article
Students read an article and demonstrate their understanding by working through a series of flashcards to create an outline of the material

Writing Essays

- Types of Essays
Introduces essay writing by covering argumentative, descriptive, narrative, analysis, and informational essays. Briefly covers characteristics of each
- Parts of an Essay
Reviews the concept of introduction, body, and closing
- Writing a Thesis Statement
How to get your essay off to a solid start
- Using a Hook
Shows students how to use a hook in the introduction to an essay
- Organizational Techniques
Covers different ways of organizing essays, including comparison/contrast, spatial, chronological, and cause/effect
- Deciding When to Paragraph
Shows students how to decide when to end a paragraph and begin a new one
- Formatting your Essay
Margins, indenting, cut-and-paste functions, tabs, and line spacing
- Making an Outline
Introduce concept of creating an outline before writing an essay
- Writing a First Draft
How to write a first draft; incorporates use of an outline
- Revising Your Draft
Covers strategies for revising essays, including looking for grammatical errors, revising for consistency, vocabulary, sentence length, etc
- Writing a Final Draft
Shows students how to create a final draft from a revised draft
- Your Turn: Write a Comparison Essay
Students are reminded of how to compare and contrast two people, places, or things. Their assignment is to write an essay of five paragraphs, demonstrating an understanding of the organization of an essay and the ability to write clear sentences, use transitions, and provide a clear opening and closing. Target is 500-700 words
- Your Turn: Write a Persuasive Essay
Students are reminded that a persuasive essay requires a thesis, an explanation of the situation, and persuasive evidence to validate a position. They are reminded, as well, to anticipate and address a reader's likely counterarguments. Target is 500-700 words

Research Reports

- What is a Research Report
Explains that research reports include both expert opinions and your own personal conclusions
- Choosing a Topic
Choosing a topic of appropriate scope

- Finding Sources
Students are taught to find and use multiple sources, such as books, magazines, documentaries, online searches, etc
- Taking Notes
What to write down and how to do it
- Writing it Down
Students are reminded of the process of outlining, writing, and editing their work
- The Bibliography
What is a bibliography? What is the proper format?
- Your Turn: Writing a Research Report
Students formulate and write a clear, focused report that includes an introduction, supporting evidence, and a conclusion. Report should include a title and a bibliography and be in the 500-700 word range. Students will edit and revise their work as necessary

Reading Literature

- Characteristics of Westerns and Mysteries
- Foreshadowing
What is foreshadowing? How is it used in mysteries and in westerns?
- Tone and Mood
Introduction to these terms, using westerns and mysteries as examples
- Making Inferences and Drawing Conclusions
Uses examples from westerns and mysteries to guide students through drawing conclusions and making inferences as they read
- Irony
An introduction to irony
- Read a Novel
Students read the novel and answer questions about theme, character development and motivation, plot, sequence, conflict and resolution etc
- Sayings
Davy Jones' locker. A chip on your shoulders. Burning the Midnight Oil.
- Reading Aloud
Students read fluently and accurately with appropriate expression and intonation

Creative Writing

- Writing about Yourself
How and why you might choose to write about yourself
- Using First Person
What is first person? Making sure to keep verbs in the proper tense when writing in first person
- Descriptive Writing
Using sensory details

- Using Dialogue
What is dialogue? Why and how to use it, and a reminder about how to punctuate it correctly
- Creating a Character
How to create an interesting character
- Creating a Plot
How to come up with an interesting plot; how to get your character into trouble and back out again
- Choosing a Setting
Why is the setting important? How much description is needed? Is setting more important in some stories than in others
- Your Turn: Write a Story
Students write a story with a clear plot, a setting, and a well-developed character. Students include vivid details and use dialogue, suspense, and/or foreshadowing appropriately

Reading Early American Documents

- Bias and Propaganda
Allows students to determine bias by looking at excerpts from early American speeches
- Reading Historical Documents
Introduction to primary and secondary sources

Poetry

- Rhythm and Meter
A review of rhythm and meter; students learn how the rhythm and meter affect the tone of a poem
- Figurative Language
What is it? Practice identifying what it means. How does figurative language affect a reader?
- Ballads
Introduction to and explanation of the ballad
- Epic Poems
Introduction to and explanation of the epic poem

Applications

- Filling out Applications
Practice in this essential skill

Spelling and Pronunciation

- Write it Right
Includes more advanced homophones, homographs, and heteronyms such as counter/counter, minute/minute, and bass/bass

Vocabulary

- Greek Roots and Affixes
Annotation
- Shades of Meaning
Choosing the appropriate word for the context
- Context
Understanding unfamiliar terms or words used in a novel way by using context clues
- Vocabulary A-C
- Vocabulary D-J
- Vocabulary K-R
- Vocabulary S-Z

Listening

- Listening to Speeches
Students watch and react to speeches, noting the speakers' verbal and nonverbal messages and identifying the tone or mood conveyed in the speech
- Listening to Commercials
Students listen to commercials and answer questions about their effectiveness, persuasiveness, and any false or misleading information contained therein

Speaking

- Writing a Speech
How to organize and write a speech; how is a speech different from an essay?
- Practicing the Speech
Transferring the speech to note cards and practicing delivery; emphasizing the main points; varying your volume and speed of delivery
- Visual Aids
Using props, posters, or technology to support your point
- Your Turn: Delivering a Narrative Speech
Flashcards emphasize the characteristics of a narrative speech. Assignment to students is to prepare and deliver said speech
- Your Turn: Delivering an Informative Speech
Flashcards emphasize the characteristics of an informative speech. Assignment to students is to prepare and deliver said speech
- Your Turn: Telling about a Novel
Flashcards emphasize the characteristics of the speech. Assignment to students is to prepare and deliver said speech
- Your Turn: Delivering a Persuasive Speech
Flashcards emphasize the characteristics of a persuasive speech, such as articulating a clear statement of a position and using solid evidence. Assignment to students is to prepare and deliver said speech

- Your Turn: Delivering a Problem/Solution Speech
Flashcards teach students to define a problem, discuss its effects and establish a solution. Assignment to students is to prepare and deliver said speech

Grade Six Math

Number Sense

- Ordering
Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line
- Ratios
Interpret and use ratios in different contexts (e.g., batting averages, miles per hour) to show the relative sizes of two quantities, using appropriate notations (a/b , a to b , $a:b$)
- Proportions
Use proportions to solve problems; use cross-multiplication as a method for solving such problems, understanding it as the multiplication of both sides of an equation by a multiplicative inverse
- Percentages
Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips
- Manipulating Positive Fractions
Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation
- Understanding Positive Fractions
Explain the meaning of multiplication and division of positive fractions and perform the calculations (e.g., $5/8 \div 15/16 = 5/8 \times 16/15 = 2/3$)
- Practice
Solve addition, subtraction, multiplication, and division problems, including those arising in concrete situations, which use positive and negative integers and combinations of these operations
- LCM and GCD
Determine the least common multiple and the greatest common divisor of whole numbers; use them to solve problems with fractions

Algebra and Functions

- Linear Equations with One Variable
Write and solve one-step linear equations in one variable;
- Algebraic Expressions
Write and evaluate an algebraic expression for a given situation, using up to three variables
- Order of Operations
Apply algebraic order of operations and the commutative, associative, and distributive properties to evaluate expressions; and justify each step in the process

- Practice With Order of Operations
Solve problems manually by using the correct order of operations or by using a scientific calculator
- Measurement Conversions
Convert one unit of measurement to another (e.g., from feet to miles, from centimeters to inches)
- Rate, Speed, Distance and Time
Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity; solve problems involving rates, average speed, distance, and time
- Geometric Variables
Use variables in expressions describing geometric quantities (e.g., $P = 2w + 2l$, $A = 1/2bh$, $C = \pi(d)$)
- Geometric Algebra
Express in symbolic form simple relationships arising from geometry

Measurement and Geometry

- Circles
Understand the concept of a constant such as π ; know the formulas for the circumference and area of a circle
- Estimations and Calculations of Circumference
Know common estimates of π (3.14; 22/7) and use these values to estimate and calculate the circumference and the area of circles; compare with actual measurements
- Prisms and Cylinders
Know and use the formulas for the volume of triangular prisms and cylinders (area of base \times height); compare and explain the similarity between them and the formula for volume of a rectangular solid
- Types of Angles
Identify angles as vertical, adjacent, complementary, or supplementary and provide descriptions of these terms
- Using Angles
Use the properties of complementary and supplementary angles and the sum of the angles of a triangle to solve problems involving an unknown angle
- Understanding Angle Information
Draw quadrilaterals and triangles from given information about them (e.g., a quadrilateral having equal sides but no right angles, a right isosceles triangle)

Statistics, Data Analysis, and Probability

- Range, Mean, Median and Mode
Compute the range, mean, median, and mode of data sets
- Additional Data and Outliers
Understand how additional data added to data sets may affect these computations of measures of central tendency; how the inclusion or exclusion of outliers affects measures of central tendency
- Application of Mean and Median
Know why a specific measure of central tendency (mean, median) provides the most useful information in a given context

- **Sample Comparisons**
Compare different samples of a population with the data from the entire population and identify a situation in which it makes sense to use a sample
- **Selecting Samples**
Identify different ways of selecting a sample (e.g., convenience sampling, responses to a survey, random sampling) and which method makes a sample more representative for a population
- **Analyze Data Displays**
Analyze data displays; explain why the way in which the question was asked might have influenced results obtained and why the way in which the results were displayed might have influenced conclusions
- **Sampling Errors and Validity**
Identify data that represent sampling errors and explain why the sample (and the display) might be biased; identify claims based on statistical data and, in simple cases, evaluate their validity
- **Probability and Compound Events**
Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome
- **Probability of Future Events**
Use data to estimate the probability of future events (e.g., batting averages or number of accidents per mile driven)
- **Representing Probabilities**
Represent probabilities as ratios, proportions, decimals, and percentages; verify results are reasonable; if P is the probability of an event, $1 - P$ is the probability of an event not occurring
- **Separate Events**
Probability of either of two disjoint events occurring is the sum of the two probabilities; probability of one event following another is product; difference between independent and dependent events

Mathematical Reasoning

- **Analyzing Problems**
Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns
- **Mathematical Conjectures**
Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed
- **Simplifying Problems**
Determine when and how to break a problem into simpler parts
- **Verifying Results by Estimation**
Use estimation to verify the reasonableness of calculated results
- **Applying Strategies and Results**
Apply strategies and results from simpler problems to more complex problems

- **Unknown Quantities**
Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques
- **Explain Your Reasoning**
Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning
- **Expressing Solutions**
Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work
- **Estimation**
Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy
- **Results That Make Sense**
Make precise calculations and check the validity of the results from the context of the problem; evaluate the reasonableness of the solution in the context of the original situation
- **Applying Knowledge**
Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems; develop generalizations of the results obtained and the strategies used and apply them to new problem situations

Grade Six Science

Plate Tectonics and Earth's Structure

- **Evidence of Plate Tectonics**
Evidence of plate tectonics is derived from the fit of the continents; the location of earthquakes, volcanoes, and midocean ridges; the distribution of fossils, rock types, and ancient climatic zones
- **The Layers of Earth**
Students know Earth is composed of several layers: a cold, brittle lithosphere; a hot, convecting mantle; and a dense, metallic core
- **Lithospheric Plates**
Students know lithospheric plates the size of continents and oceans move at rates of centimeters per year in response to movements in the mantle
- **Faultlines, Volcanoes and Fissures**
Students know that earthquakes are sudden motions along breaks in the crust called faults and that volcanoes and fissures are locations where magma reaches the surface
- **Plate Motions**
Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions
- **California and Plate Tectonics**
Students know how to explain major features of California geology (including mountains, faults, volcanoes) in terms of plate tectonics

- Earthquake Epicenters
Students know how to determine the epicenter of an earthquake and know that the effects of an earthquake on any region vary, depending on the size of the earthquake, the distance of the region from the epicenter, the local geology, and the type of construction in the region

Shaping Earth's Surface

- Water and the Landscape
Students know water running downhill is the dominant process in shaping the landscape, including California's landscape
- River and Stream Systems
Students know rivers and streams are dynamic systems that erode, transport sediment, change course, and flood their banks in natural and recurring patterns
- Beach Systems
Students know beaches are dynamic systems in which the sand is supplied by rivers and moved along the coast by the action of waves
- Earth Movement and Habitats
Students know earthquakes, volcanic eruptions, landslides, and floods change human and wildlife habitats

Heat and Thermal Energy

- Heat Energy
Energy can be carried from one place to another by heat flow or by waves (water, light and sound waves, or by moving objects); when fuel is consumed, most of the energy released becomes heat energy
- Conduction and Convection
Heat flows in solids by conduction (which involves no flow of matter) and in fluids by conduction and by convection (which involves flow of matter)
- Heat Energy and Radiation
Students know heat energy is also transferred between objects by radiation (radiation can travel through space)

Energy in the Earth System

- Energy From the Sun
The sun is the major source of energy for phenomena on Earth's surface; it powers winds, ocean currents, and the water cycle; solar energy reaches Earth by radiation, mostly as visible light
- Heat by Convection
Students know heat from Earth's interior reaches the surface primarily through convection; convection currents distribute heat in the atmosphere and oceans
- Changes in Weather
Students know differences in pressure, heat, air movement, and humidity result in changes of weather

Ecology

- Transfer of Energy in Ecosystems
Students know energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis and then from organism to organism through food webs
- Transfer of Matter in Ecosystems
Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment
- Categorizing Populations
Students know populations of organisms can be categorized by the functions they serve in an ecosystem
- Relation of Ecological Roles
Students know different kinds of organisms may play similar ecological roles in similar biomes
- Ability of Ecosystems to Support Organisms
The number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors (quantities of light and water, a range of temperatures, and soil composition)

Resources

- Utility of Energy Sources
Students know the utility of energy sources is determined by factors that are involved in converting these sources to useful forms and the consequences of the conversion process
- Energy and Material Resources
Know different natural energy and material resources, including air, soil, rocks, minerals, petroleum, fresh water, wildlife, and forests, and know how to classify them as renewable or nonrenewable
- Natural Origins
Students know the natural origin of the materials used to make common objects

Investigation and Experimentation

- Hypothesis
Develop a hypothesis
- Using Scientific Tools
Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
- Creating and Interpreting Data Graphs
Construct appropriate graphs from data and develop qualitative statements about the relationships between variables
- Report Findings
Communicate the steps and results from an investigation in written reports and oral presentations

- Evaluating Evidence
Recognize whether evidence is consistent with a proposed explanation
- Using Map Evidence
Read a topographic map and a geologic map for evidence provided on the maps and construct and interpret a simple scale map
- Interpreting Natural Phenomena Events
Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions)
- Identifying Changes
Identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, a hill slope)

Grade Six Social Studies

Early Development of Humankind

- Hunter-Gatherer Societies
Way of life; development of tools and the use of fire
- Human Communities
Locations of human communities that populated the major regions of the world; how humans adapted to a variety of environments from the Paleolithic Era to the agricultural revolution
- Climate Change
Climatic changes and human modifications of the physical environment that gave rise to the domestication of plants and animals and new sources of clothing and shelter

Early Civilizations

- Geography
Major river systems; physical settings that supported permanent settlement and early civilizations
- Agriculture
Development of agricultural techniques that permitted the production of economic surplus and the emergence of cities as centers of culture and power
- Religion
Relationship between religion and the social and political order in Mesopotamia and Egypt
- Hammurabi's Code
Its significance
- Culture
Main features of Egyptian art and architecture
- Commerce
Role of Egyptian trade in the eastern Mediterranean and Nile valley
- Rulers
Significance of Queen Hatshepsut and Ramses the Great

- Kush Civilization
Location; political, commercial, and cultural relations with Egypt
- Language
Evolution of language and its written forms

The Ancient Hebrews

- Basic Concepts
Origins; significance of Judaism as the first monotheistic religion; concept of one God who sets down moral laws for humanity
- Ethics Teaching and Central Beliefs
Hebrew Bible, the Commentaries; belief in God, observance of law, practice of the concepts of righteousness and justice, importance of study; how the ideas of the Hebrew traditions are reflected in the moral and ethical traditions of Western civilization
- Important People
Significance of Abraham, Moses, Naomi, Ruth, David, and Yohanan ben Zaccai in the development of the Jewish religion
- Geography
Locations of the settlements and movements of Hebrew peoples; the Exodus and their movement to and from Egypt; significance of the Exodus to the Jewish and other people
- Diaspora
How Judaism survived and developed despite the continuing dispersion of much of the Jewish population from Jerusalem and the rest of Israel after the destruction of the second Temple in A.D. 70

Ancient Greece

- Geography
Connections between geography and the development of city-states in the region of the Aegean Sea; patterns of trade and commerce among Greek city-states and within the wider Mediterranean region
- Government
Transition from tyranny and oligarchy to early democratic forms of government and back to dictatorship in ancient Greece; significance of the invention of the idea of citizenship - e.g., from Pericles' Funeral Oration
- Direct Democracy
Key differences between Athenian, or direct, democracy and representative democracy
- Mythology
Significance of Greek mythology to the everyday life of people in the region; how Greek literature continues to permeate our literature and language today, drawing from Greek mythology and epics, such as Homer's Iliad and Odyssey, and from Aesop's Fables
- Persian Empire
Its founding, expansion, and political organization
- Athens and Sparta
Compare and contrast life in Athens and Sparta; their roles in the Persian and Peloponnesian Wars

- Alexander the Great
Rise of Alexander the Great; spread of Greek culture eastward and into Egypt
- Important People
Enduring contributions important Greek figures in the arts and sciences - e.g., Hypatia, Socrates, Plato, Aristotle, Euclid, Thucydides

Early Civilizations of India

- Geography
The major river system and its location; physical setting that supported the rise of this civilization
- Aryan Invasions
Their significance
- Hinduism
Major beliefs and practices of Brahmanism in India; how they evolved into early Hinduism
- Social Structure
Caste system
- Buddhism
Life and moral teachings of Buddha; how Buddhism spread in India, Ceylon, and Central Asia
- Maurya Empire
Its growth; political and moral achievements of the emperor Asoka
- Culture
Important aesthetic and intellectual traditions - Sanskrit literature, including the Bhagavad Gita; medicine; metallurgy; mathematics, including Hindu-Arabic numerals and the zero

Early Civilizations of China

- Origins
Location and origins of Chinese civilization in the Huang-He Valley during the Shang Dynasty
- Geography
Geographic features of China that made governance and the spread of ideas and goods difficult and served to isolate the country from the rest of the world
- Confucius
His life; fundamental teachings of Confucianism and Taoism
- Politics and Culture
Political and cultural problems prevalent in the time of Confucius and how he sought to solve them
- Emperor Shi Huangdi
His policies and achievements in unifying northern China under the Qin Dynasty
- Han Dynasty
Political contributions of the Han Dynasty to the development of the imperial bureaucratic state and the expansion of the empire

- Silk Road
Significance of the trans-Eurasian "silk roads" in the period of the Han Dynasty and Roman Empire; their locations
- Spread of Buddhism
Its diffusion northward to China during the Han Dynasty

The Roman Empire

- Origins
Location and rise of the Roman Republic; importance of such mythical and historical figures as Aeneas, Romulus and Remus, Cincinnatus, Julius Caesar, and Cicero
- Government
Government of the Roman Republic and its significance; written constitution and tripartite government, checks and balances, civic duty
- Growth and Expansion
Location of and political and geographic reasons for the growth of Roman territories and expansion of the empire; how the empire fostered economic growth through the use of currency and trade routes
- Julius Caesar and Augustus
Their influence in Rome's transition from republic to empire
- The Jews
Their migration around the Mediterranean region; effects of their conflict with the Romans; Romans' restrictions on their right to live in Jerusalem
- Early Christianity
Origins of Christianity in the Jewish Messianic prophecies; life and teachings of Jesus of Nazareth as described in the New Testament; contribution of St. Paul the Apostle to the definition and spread of Christian beliefs - e.g., belief in the Trinity, resurrection, salvation
- Spread of Christianity
The circumstances that led to the spread of Christianity in Europe and other Roman territories
- Culture
Legacies of Roman art and architecture, technology and science, literature, language, and law

Grade Six Health

Reducing Health Risks Common to Adolescents

- Exercise
- Diet
- Refusal of Harmful Substances

Environmental Conditions and Potential Solutions

- Global Conditions

- Local Conditions
- What Has Been Done to Prevent the Global Conditions?
- Potential Solutions for Local Conditions

Safety Precautions in Practical Situations

- Motor Vehicles
- Bicycles
- In/Near Water
- As a Pedestrian

Causes/Consequences of Conflict/Violence in Schools & Communities

- Causes of Conflict
- Avoiding Conflicts
- Avoiding Gangs & Bullies
- Problems in Relationships

Refusal and Negotiation Skills

- Self Management Skills
- No to Steroids
- Preventing Child Abuse
- Saying the Right Thing

Understanding the Opposite Sex

- Different Needs
- Physical Attraction
- Emotional Attraction
- Gender Role

Development of Relationships

- Attraction/Desire
- Flirting
- Dating/Courtship
- Intimacy

- Marriage and Lifetime Commitments
- Raising Children

Sexual Violence

- Sexual Abuse
- Rape
- Sexual Manipulation

Gang Resistance

- Clear Messages
- Identifying When We Feel Anger

Grade Six Character Development

Character Awareness

- Finding Purpose

What is purpose? A feeling of personal contribution to society.

Why is it important for individuals to find their purpose? Without identifying a personal purpose, individuals will not find personal fulfillment and will, likewise, be unable to achieve a connection with others – it will be difficult to engage in loving relationships or establish a positive connection to society.

- Heroes v. Pseudo (False) Heroes

How are the two types of heroes different?

In their sense of purpose and how they achieve it:

Heroes pursue their purpose *for the love of that purpose*. True heroes do not need any outside motivation – they are inspired by their purpose and pursue their purpose genuinely, without ego or insecurity as a driving force.

Example of a hero:

Isaac Stern, the famous violinist, pursued playing the violin as a young boy because he loved to play the instrument. He reached a point where he no longer needed the encouragement or approval of his parents or teachers to keep playing the violin – the violin became *his* purpose.

Pseudo heroes (false heroes) pursue their purpose *to achieve celebrity status, win competitions and override their personal insecurities* – typically a reaction to low self-esteem. Pseudo heroes often base their purpose in “proving something” to others.

Example of a pseudo hero:

Paris Hilton, heiress to the “Hilton Hotel” empire, became famous for her socialite status – not for any larger personal contributions she had made to society.

Extend discussion of heroes to examine why we admire certain people – what makes them great? Consider whether someone is famous because they are great; or whether they seem great because they are famous. Who are your role models and why?

Levels of Awareness

- Grief

Grief is a level characterized by feelings of constant sadness and loss. Many people drop to this level upon losing a loved one. This level is still higher than the state of apathy, as individuals are not numb – they are experiencing emotional feeling.

- Fear

Fear is a level characterized by an overwhelming belief that the world is unsafe. It is often marked by paranoia and many people in this level require the help of others to rise above it.

* Recognize that “fear” is not always a negative emotion. Example: Fear serves an important purpose in situations where individuals need protection from danger or should proceed with caution.

Character in Action

- Grief: People who live at this level on an ongoing basis (rather than temporarily, after the loss of a loved one) lead a life of constant regret and sadness. Effects include feelings of remorse about the past; individuals in this level see sadness everywhere around them.
- Fear: In this level, fear becomes the individual’s main focus. Effects include continuous worry about worldly events, impeding personality growth and fostering inhibition. It often requires the energy of others at higher levels of awareness to bring individuals out of the level of fear. Often, abusive relationships include one person stuck in this level who is too fearful to get out of the harmful relationship.
- Extend the discussion of fear, identifying potential outcomes from living in fear and why it is important for individuals to raise above this level of awareness.

Grade Six Interpersonal Relationships

Peer Relationships

- What are peers?

Peers are a group of individuals who interact on a regular basis (classmates, schoolmates, co-workers, etc.); these groups typically share friendship, talk with one another and do activities together.

What creates peer groups?

Peer groups are often a result of individuals sharing similarities based on the following:

- Beliefs
- Behaviors

- Activities
- Academics
- What is peer pressure?

Peer pressure is the influence exerted by a peer group in encouraging a person to change his or her attitudes, values, or behavior in order to conform to group norms.

- Why do kids give in to peer pressure?
 - Desire to be liked
 - Desire to “fit in”
 - Fear of being made fun of
 - Curiosity
- How to deal with peer pressure

Some peer pressure can be positive (if it influences you to make healthy and wise decisions); but negative peer pressure can be harmful.

The following are methods for recognizing and dealing with negative peer pressure:

- Pay attention to your own beliefs about what is right and wrong
- Find inner strength and self-confidence in your decisions
- Seek out others who may feel the same as you do; bond with others who share your values
- Choose your friends wisely; associate with people who have similar interests
- Talk to someone you trust (parent, teacher, counselor) about the pressure you are facing; do not feel guilty for past mistakes

Bullying

- What is bullying?

Bullying is the act of hurting or scaring another person on purpose; the person being bullied typically has a difficult time defending themselves. Bullying tends to happen on an ongoing basis until something is done to break the cycle.

- Acts of bullying include:
 - Punching, shoving or other physical harm to others
 - Spreading negative rumors about others
 - Keeping certain people out of “a group”
 - Encouraging people to “gang up” on others
 - Teasing people in a mean way

- What is cyberbullying?

Cyberbullying is when children or teens bully each other using the Internet, mobile phones or other technology.

Acts of cyberbullying can include:

- Sending mean text messages, emails or instant messages
- Posting negative pictures or messages about others in blog pages or websites
- Using someone else's login information to spread rumors or lies about another person

- Why kids bully

The following are some of the common reasons why kids bully others:

- They see others doing it
- They believe it will make them "fit in"
- It makes them feel stronger, smarter or better than other people
- They believe it will keep others from bullying them

- Effects of bullying

Kids who are bullied can experience lifelong negative effects including:

- Dropping out of school
- Drug, alcohol or tobacco use
- Aggression and tendency to get into fights

- How to deal with bullying

Incidents of bullying should be identified and reported to an adult; additional methods for dealing with bullies can be found at <http://www.stopbullyingnow.hrsa.gov/kids/>

Grade Six Health & Wellness

Tobacco Use

- What is tobacco? What is nicotine?

Tobacco is a plant that can be smoked in cigarettes, pipes or cigars; it is also used in smokeless tobacco forms (such as chewing tobacco)

Nicotine is a substance contained in tobacco; it is an addictive chemical that can cause a short-term tingly feeling

- Why is tobacco dangerous?

Tobacco is responsible for approximately 1,200 deaths per day due to its harmful effects to the heart and lungs.

Tobacco use poses significant physical harm including:

- Cancer-causing agents due to damage of cell growth and reproduction
- Chronic lung injury
- Decreased antioxidants
- Chronic inflammation
- Lower immunity and increased risk for respiratory infection
- Inability for blood cells to carry enough oxygen
- General crankiness and exhaustion
- Poor personal appearance and hygiene
- Poor physical performance (in sports or other active pursuits)

Alcoholism

- What is alcohol? What characterizes alcoholism?

Alcohol (in reference to “drinking”) is a liquor or brew containing alcohol as the active agent

Alcoholism refers to prolonged and excessive intake of alcoholic drinks; alcoholism is considered a disease and can lead to a breakdown in health and relationships; sufferers experience an intense addiction to alcohol that, when deprived, an individual can experience severe symptoms of withdrawal including anxiety, seizures and nausea

- Dangers of alcohol:

Alcohol affects the central nervous system in the following ways:

- Decreased activity and inhibitions (cautionary behavior)
- Change in behavior
- Slowed motor skills
- Decreased ability to think clearly
- Impaired concentration

- Intoxication (drunkenness)
- Signs of alcoholism:
 - Abdominal pain; nausea and vomiting
 - Drinking alone; secretive behavior to hide alcohol use
 - Episodes of violence/hostility with drinking
 - Confusion
 - Lack of control over drinking/alcohol intake

- Alcohol treatment:

Treatment methods for alcoholism include intervention, detoxification and rehabilitation.

Additional information is available through the Substance Abuse and Mental Health Services Administration's National Drug and Alcohol Treatment Service at 1-800-662-HELP (4357) or www.findtreatment.samhsa.gov.

Grade Six Study Skills

Reading Assignments

- To be effective, reading assignments require work before, during and after the process:

Before the assignment – students should consider what they already know about the topic they are about to read about and do the following:

- write down predictions about the content
- determine what is already known about the content
- determine what you want to know about the topic

During the assignment – students should guide their reading by making observations about the content as they read and do the following:

- write down questions
- rephrase information in different words
- make lists/create categories of information

After the assignment – students should follow their reading with review processes including:

- reciting
- self-testing

- review question development
- peer teaching

Writing Assignments

- To be effective, written reports require many steps including:

Time management – long-term projects should be divided into separate stages of completion (due dates for topic ideas, rough draft, bibliography, etc.)

Topic selection – narrow down your search for a topic by conducting research and making an outline of information

Note taking – generate main ideas and create a chart or list of these ideas; revise this chart as research is conducted to support specific concepts

Research – identify references and form a bibliography – locate reference materials to help you learn about the topic and cite your sources

Rough draft – develop an introduction (that explains what your report will be about), a report body (where you present your findings), and a conclusion (that evaluates what you have reported)

Final draft – check the rough draft for any errors in spelling, grammar or expression of ideas; ensure all areas of report are included

Seventh Grade

Free World U

Grade Seven Language Arts

Vocabulary

- Anglo-Saxon Roots and Affixes
Extensive lesson of the meaning of Anglo-Saxon roots and affixes
- Using Vocabulary Resources
Thorough examination of dictionary and thesaurus entries; explains all aspects of entries, including the language of origin
- Figuring out Difficult Words
Using definitions, examples, restatement, definition by using a synonym or antonym, or contrast to figure out unknown words
- Words from Peoples' Names
Common American words derived from the names of inventors and the like

Reading Literature

- Fiction Genres
Discussion and definition of epic, novel, drama, poetry, science fiction, etc
- Plot
Discussion of plot, conflict, and protagonists. Also covers man vs. man, man vs. nature, and other similar conflict patterns
- Setting
Discussion of the time, place, and political circumstances surrounding a story
- Direct and Indirect Characterization
Discussion of how readers learn about characters through the character's thoughts, speech patterns, and actions; the words and actions of other characters; and the narrator's description.
- Character Development
Discussion of major and minor characters types
- Read a Novel
Students read a novel and answer questions about the events that advance the plot, foreshadowing, characterization, the narrator, themes, and the writer's choice of first or third person, etc

Reading Short Stories and Novellas

- Characteristics of Short Fiction
Short stories are less complex than novels and usually feature just one event, a single setting, and fewer characters than a novel. Short stories stick to the point and often make a point as well
- Genres
Short stories are written in different genres: science fiction, western, etc. This lesson introduces some options to students
- Points of View

Defines narrator, and teaches characteristics of first person, third person limited, and third person omniscient

- Reading a Short Story
Students read a short story. Flashcards ask students to identify the various characteristics of short fiction in the selection
- What is a Novella?
Answers the question and supplies examples

Reading Nonfiction

- Types of Nonfiction
Extensive discussion of the many types of expository writing
- Structure and Organization
Chronological order, comparison/contrast, order of importance, etc
- Determining Main Ideas
Reading to find the main idea; implicit and explicit ideas
- Making Inferences
Inferences and implications, deductive and inductive reasoning
- Reading Actively
Asking yourself questions, the preview-read-recite method, survey-question-read-recite-review method, and taking notes
- Evaluating Evidence
Looking at sources, evidence, publication dates, author's background, etc
- Reading Instructions
Students read and demonstrate an understanding of technical instructions
- Reading Critically: Nonfiction Article One
- Reading Critically: Nonfiction Article Two

Poetry

- Lyric Poetry
Lyric poetry is poetry that expresses emotion. Students read and study examples
- Imagery in Poetry
Students define and locate imagery in a variety of poems; similes, metaphors, personification, and assonance are included in the lesson
- Your Turn: Write a Lyric Poem
This is a poem that expresses emotion and appeals to the senses; use of literary devices such as similes, metaphors, hyperbole, alliteration, etc, including at least two in their poem

Newspapers

- What is a Newspaper Article?
Characteristics of a news article; where do reporters get their information; answering the 5w and 1h questions, who, what, when, where, why, and how

- Reading a Newspaper Article
Students read a newspaper article and identify its lead, sources, background information, etc.
- Your Turn: Write a Newspaper Article
Assignment to students is to write a newspaper article based on the information in a given fairy tale
- What is an Editorial?
Explains that this is the opinion of the newspaper on an issue; it is based on evidence and written in a persuasive style; it calls for some sort of action: either for readers to think or act a certain way or for someone to take up a cause, change a law, etc. An editorial often anticipates reader objections and addresses them
- Reading an Editorial
Students read an editorial and identify its main idea, evidence, possible objections that it anticipated, etc.
- Your Turn: Write an Editorial
Student is to write a persuasive paper in the style of a newspaper editorial. They should cite sources and state a clear position and call for action. They should anticipate and address obvious reader concerns

Grammar

- Parts of Speech
Practice identifying all eight parts of speech in more complicated sentences than in previous grades
- Adjectives and Adverbs
Identifying and using them
- Irregular Verbs
Review of the most troublesome irregulars
- Misplaced Modifiers
Examples of and practicing fixing
- Problems with Pronouns
Avoiding tricky situations
- Infinitives and Participles
Defines the terms and gives students practice correcting errors
- Gerunds
Review
- Pronouns and Antecedents
Reviews the terms and gives students practice correcting errors
- Sentence Types
Reviews simple, compound, complex, and compound-complex sentences and asks students to identify type
- Punctuation
Reviews hyphens, dashes, brackets, semicolons, colons

- You're the Editor
Students practice correcting a range of problems including shifts in tense and voice, subject-verb agreement, capitalization errors, run-on and fragmented sentences, etc

Writing Nonfiction Essays

- Reviewing the Essay
Reviews the structure of an essay
- Your Turn: Write a Descriptive Essay
Reviews the elements of a descriptive essay; assignment to students is to write a descriptive essay
- Your Turn: Write an Informational Essay
Reviews the elements of an informational essay; assignment to students is to write an informational essay

Writing Research Papers

- What is a Research Paper?
How is it different from an essay?
- Thesis Statement
Defines thesis statement and shows students examples
- Choosing Reference Materials and Taking Notes
Shows students how to select references based on their topic and audience
- Referring to Your References Properly
Following MLA format, we show students when to use italics and when to use quotation marks to identify their sources
- Making an Outline
Students know what an outline is. Teach them to write an outline for a research paper
- Writing a Rough Draft
Cover strategies for writing a rough draft of a research paper using their notes and outline
- Revising for Clarity
Shows students how to revise their writing to clarify vague or unclear writing
- Using Footnotes
What is a footnote? How do you use it?
- To Quote or Paraphrase?
Defines the terms and discusses the difference. Reminds about proper punctuation. Includes information about plagiarism, what it is and how to avoid it
- Writing a Final Copy
Polishing the rough draft: reading aloud, examining sentences for errors, tightening up sentences, adding description, checking to be sure there is proper attribution given; also covers how the paper should look, covering margins, titles, page numbers, and where to put your name
- Writing a Bibliography
Using MLA format to create a bibliography

Writing Fiction

- Writing Fiction
Covers basic elements of fiction and briefly cover genres in fiction
- Who is Telling Your Story?
An all-knowing narrator? The main character? Someone else?
- Planning Your Story's Plot
Guides students through making an outline, creating and resolving conflict, avoiding too-simple solutions; story plot should include a beginning, conflict, rising action, climax, and denouement
- Developing Characters
Creating a character profile to help make your main character "come alive" for you – and your readers; paying attention to minor characters
- Creating Effective Similes and Metaphors
Teaches students to create their own similes and metaphors and avoid clichés
- Revising Your Fiction
Adding descriptive words, dialog, or actions; adding in gestures or facial expressions for your characters, looking for ways to increase suspense or add foreshadowing to an early part of the story. Also covers the basics: reminders about grammar, spelling, and sentence structure
- Your Turn: Writing Fiction
Assignment to students is to write a story, demonstrating an understanding of all aspects of plot, characters, and setting. Students are challenged to include literary devices such as figurative language and foreshadowing and descriptive words to help readers "see" the action

Spelling

- Practice
Correct spelling of lengthy words, those with both prefixes and suffixes attached

Listening

- Listening for Propaganda
What is propaganda? Defines some of the common forms for students to watch for in listening activities. Testimonials, bandwagon, glittering generalities, plain folks, assertion, and the lesser of two evils are the approaches covered
- Listening to a Campaign Speech
Students listen to a short speech and identify persuasive techniques and the impact on the listener
- Listening to an Informational Speech
Students listen to an informational speech and answer questions to determine their understanding of the information, the validity of the claims, and the speaker's attitude toward the subject and the impact it will have on the listener
- Watching a Speech

Students analyze the effect on the viewer of images and sounds used in a recorded speech

Speaking

- Writing a Speech
Organizing your thoughts and appealing to the interests of the audience
- Practicing a Speech
Vocal techniques such as inflection, tempo, and enunciation; maintaining eye contact, working in gestures, adding visuals in
- Conquering Nerves
Tips to avoid stage fright
- Your Turn: Delivering a Campaign Speech
This year students have gained more experience identifying and understanding propaganda, so we'll let them have some fun writing their own. Flashcards teach how it's done. Students will deliver a persuasive speech, in first-person if they choose, with the goal of convincing listeners to vote for themselves or their candidate
- Your Turn: Delivering a Summary Speech
Students read one of several provided articles and choose one to summarize and explain the main idea and significant details

Grade Seven Math

Number Sense

- Scientific Notation
Read, write, and compare rational numbers in scientific notation (positive and negative powers of 10) with approximate numbers using scientific notation
- Manipulating Rational Numbers
Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers
- Fractions to Decimals and Percents
Convert fractions to decimals and percents and use these representations in estimations, computations, and applications
- Rational and Irrational Numbers
Differentiate between rational and irrational numbers
- Terminating and Repeating Decimals
Know that every rational number is either a terminating or repeating decimal and be able to convert terminating decimals into reduced fractions
- Percentages of Increase and Decrease
Calculate the percentage of increases and decreases of a quantity
- Money and Percentages
Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest
- Negative Exponents

Understand negative whole-number exponents. Multiply and divide expressions involving exponents with a common base

- Adding and Subtracting Fractions
Add and subtract fractions by using factoring to find common denominators
- Rational Numbers and Exponent Rules
Multiply, divide, and simplify rational numbers by using exponent rules
- Powers, Roots and Square Integers
Use the inverse relationship between raising to a power and extracting the root of a perfect square integer;
- Powers, Roots and Non-Square Integers
For an integer that is not square, determine without a calculator the two integers between which its square root lies and explain why
- Absolute Value
Understand the meaning of the absolute value of a number; interpret the absolute value as the distance of the number from zero on a number line; and determine the absolute value of real numbers

Algebra and Functions

- Equations Representing Descriptions
Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A)
- Using Order of Operations
Use the correct order of operations to evaluate algebraic expressions such as $3(2x + 5)^2$
- Applying Properties
Simplify numerical expressions by applying properties of rational numbers (e.g., identity, inverse, distributive, associative, commutative) and justify the process used
- Using Algebraic Terminology
Use algebraic terminology (e.g., variable, equation, term, coefficient, inequality, expression, constant) correctly
- Representing Relationships Graphically
Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph
- Understanding Exponents
Interpret positive whole-number powers as repeated multiplication and negative whole-number powers as repeated division or multiplication by the multiplicative inverse. Simplify and evaluate expressions that include exponents
- Monomials and Exponents
Multiply and divide monomials; extend the process of taking powers and extracting roots to monomials when the latter results in a monomial with an integer exponent
- Graphing Functions
Graph functions of the form $y = nx^2$ and $y = nx^3$ and use in solving problems
- Plotting Varied Shape Values

Plot the values from the volumes of three-dimensional shapes for various values of the edge lengths (e.g., cubes with varying edge lengths or a triangle prism with a fixed height and an equilateral triangle base of varying lengths)

- **Slope of a Graph**
Graph linear functions, noting that the vertical change (change in y- value) per unit of horizontal change (change in x- value) is always the same and know that the ratio ("rise over run") is called the slope of a graph
- **Plotting Quantities**
Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of the line equals the quantities
- **Solving Two-Step Problems**
Solve two-step linear equations and inequalities in one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results
- **Solving Multi Step Problems**
Solve multi step problems involving rate, average speed, distance, and time or a direct variation

Measurement and Geometry

- **Comparing Between Measuring Systems**
Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters)
- **Scale Drawings and Models**
Construct and read drawings and models made to scale
- **Measure and Problem Solving**
Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer
- **Using Formulas with Geometric Figures**
Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders
- **Estimate and Compute Area**
Estimate and compute the area of more complex or irregular two-and three-dimensional figures by breaking the figures down into more basic geometric objects
- **Preparing to Use Scale Factors**
Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids
- **Applying Scale Factors**
When the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and the volume is multiplied by the cube of the scale factor
- **Changes of Scale**

Relate the changes in measurement with a change of scale to the units used (e.g., square inches, cubic feet) and to conversions between units (1 square foot = 144 square inches or $[1 \text{ ft}^2] = [144 \text{ in}^2]$, 1 cubic inch is approximately 16.38 cubic centimeters or $[1 \text{ in}^3] = [16.38 \text{ cm}^3]$)

- **Using Math Tools**
Identify and construct basic elements of geometric figures (e.g., altitudes, mid-points, diagonals, angle bisectors, and perpendicular bisectors; central angles, radii, diameters, and chords of circles) by using a compass and straightedge
- **Coordinate Graphs and Simple Figures**
Understand and use coordinate graphs to plot simple figures, determine lengths and areas related to them, and determine their image under translations and reflections
- **Pythagorean Theorem**
Know and understand the Pythagorean Theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verify the Pythagorean Theorem by direct measurement
- **Congruent Geometrical Figures**
Demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures
- **2-D Patterns of 3-D Models**
Construct two-dimensional patterns for three-dimensional models, such as cylinders, prisms, and cones
- **Elements and Relationships of 3-D Objects**
Identify elements of three-dimensional geometric objects (e.g., diagonals of rectangular solids) and describe how two or more objects are related in space (e.g., skew lines, the possible ways three planes might intersect)

Statistics, Data Analysis, and Probability

- **Displays For Data Sets**
Know various forms of display for data sets, including a stem-and-leaf plot or box-and-whisker plot; use the forms to display a single set of data or to compare two sets of data
- **Scatter Plots**
Represent two numerical variables on a scatter plot and informally describe how the data points are distributed and any apparent relationship that exists between the two variables (e.g., between time spent on homework and grade level)
- **Parts of a Data Set**
Understand the meaning of, and be able to compute, the minimum, the lower quartile, the median, the upper quartile, and the maximum of a data set

Mathematical Reasoning

- **Analyzing Problems**
Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns
- **Mathematical Conjectures**
Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed

- Simplifying Problems
Determine when and how to break a problem into simpler parts
- Verifying Results by Estimation
Use estimation to verify the reasonableness of calculated results
- Applying Strategies and Results
Apply strategies and results from simpler problems to more complex problems
- Unknown Quantities
Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques
- Testing Conjectures Using Reasoning
Make and test conjectures by using both inductive and deductive reasoning
- Explain Your Reasoning
Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning
- Expressing Solutions
Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work
- Estimation
Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy
- Results That Make Sense
Make precise calculations and check the validity of the results from the context of the problem; evaluate the reasonableness of the solution in the context of the original situation
- Applying Knowledge
Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems; develop generalizations of the results obtained and the strategies used and apply them to new problem situations

Grade Seven Science

Cell Biology

- Cell Function
Cells function similarly in all living organisms
- Cell Characteristics
The characteristics that distinguish plant cells from animal cells, including chloroplasts and cell walls
- Cell Nucleus
The nucleus is the repository for genetic information in plant and animal cells; DNA (deoxyribonucleic acid) is the genetic material of living organisms and is located in the chromosomes of each cell
- Cell Energy

Mitochondria liberate energy for the work that cells do and that chloroplasts capture sunlight energy for photosynthesis

- Cell Mitosis
Cells divide to increase their numbers through a process of mitosis, which results in two daughter cells with identical sets of chromosomes
- Cell Differentiation
As multicellular organisms develop, their cells differentiate

Genetics

- Sexual and Asexual Organisms
The differences between the life cycles and reproduction methods of sexual and asexual organisms
- Genes
Cells contain many thousands of different genes, typically have two copies of every gene (or alleles) which may or may not be identical, and one may be dominant while the other is recessive
- Inherited Traits
Sexual reproduction produces offspring that inherit half their genes from each parent; an inherited trait can be determined by one or more genes

Evolution

- Theory of Evolution
The reasoning used by Charles Darwin in reaching his conclusion that natural selection is the mechanism of evolution; how independent lines of evidence provide the bases for the theory of evolution
- Causes of Evolution and Diversity
Both genetic variation and environmental factors are causes of evolution and diversity of organisms
- Constructing Classification Diagrams
How to construct a simple branching diagram to classify living groups of organisms by shared derived characteristics and how to expand the diagram to include fossil organisms
- Extinction
Extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient for its survival

Earth Sciences

- Geologic Processes
Earth processes today are similar to those that occurred in the past; slow geologic processes have large cumulative effects over long periods of time
- Catastrophic Events
The history of life on Earth has been disrupted by major catastrophic events, such as major volcanic eruptions or the impacts of asteroids
- The Rock Cycle
The rock cycle includes the formation of new sediment and rocks; rocks are often found in layers, with the oldest generally on the bottom

- Age Evidence
Evidence from geologic layers and radioactive dating indicates Earth is approximately 4.6 billion years old and that life on this planet has existed for more than 3 billion years
- Fossil Evidence
Fossils provide evidence of how life and environmental conditions have changed
- Plate Movement
How movements of Earth's continental and oceanic plates through time, with associated changes in climate and geographic connections, have affected the past and present distribution of organisms
- Geologic Time Scale
How to explain significant developments and extinctions of plant and animal life on the geologic time scale

Structure and Function in Living Systems

- Levels of System Organization
Plants and animals have levels of organization for structure and function, including cells, tissues, organs, organ systems, and the whole organism
- Organ Systems
Organ systems function because of the contributions of individual organs, tissues, and cells; the failure of any part can affect the entire system
- Bones and Muscles
How bones and muscles work together to provide a structural framework for movement
- Reproductive Organs
The reproductive organs of the human female and male generate eggs and sperm; how sexual activity may lead to fertilization and pregnancy; the function of the umbilicus and placenta during pregnancy
- Flowering Plants
The structures and processes by which flowering plants generate pollen, ovules, seeds, and fruit
- The Eye and Ear
How to relate the structures of the eye and ear to their functions

Physical Sciences

- Visible Light
Visible light is a small band within a very broad electromagnetic spectrum; for an object to be seen, light emitted by or scattered from it must be detected by the eye
- Properties of Light
Light travels in straight lines if the medium it travels through does not change; is reflected, refracted, transmitted, and absorbed by matter; angle of reflection is equal to the angle of incidence
- Simple Lenses
How simple lenses are used in a magnifying glass, the eye, a camera, a telescope, and a microscope

- **White Light**
White light is a mixture of many wavelengths (colors) and that retinal cells react differently to different wavelengths
- **Joints and Machines**
Compare joints in the body (wrist, shoulder, and thigh) with structures used in machines and simple devices (hinge, ball-and-socket, and sliding joints)
- **Bones and Levers**
How levers confer mechanical advantage and how the application of this principle applies to the musculoskeletal system
- **Heart Mechanics**
Contractions of the heart generate blood pressure and that heart valves prevent back flow of blood in the circulatory system

Investigation and Experimentation

- **Using Scientific Tools**
Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
- **Using Information Resources**
Use a variety of print and electronic resources (including the World Wide Web) to collect information and evidence as part of a research project
- **Communicating Connections**
Communicate the logical connection among hypotheses, science concepts, tests conducted, data collected, and conclusions drawn from the scientific evidence
- **Constructing Visuals**
Construct scale models, maps, and appropriately labeled diagrams to communicate scientific knowledge (e.g., motion of Earth's plates and cell structure)
- **Reporting Findings**
Communicate the steps and results from an investigation in written reports and oral presentations

Grade Seven Social Studies

Disintegration of the Roman Empire

- **Strengths and Weaknesses**
Early strengths; lasting contributions; significance of Roman citizenship; rights under Roman law; Roman art, architecture, engineering, and philosophy; preservation and transmission of Christianity; rise of autonomous military powers within the empire; undermining of citizenship by the growth of corruption and slavery; lack of education; distribution of news
- **Geography**
Geographic borders of the empire at its height; factors that threatened its territorial cohesion

- Byzantine Empire
Establishment by Constantine of the new capital in Constantinople; development of the Byzantine Empire; consequences of the development of two distinct European civilizations, Eastern Orthodox and Roman Catholic, and their two distinct views on church-state relations

Islam in the Middle Ages

- Geography
Physical features and climate of the Arabian peninsula; its relationship to surrounding bodies of land and water; and nomadic and sedentary ways of life
- Origins
Origins of Islam; life and teachings of Muhammad; Islamic teachings on the connection with Judaism and Christianity
- Religious Texts
Significance of the Qur'an and the Sunnah as the primary sources of Islamic beliefs, practice, and law; their influence in Muslims' daily life
- Expansion
Expansion of Muslim rule through military conquests and treaties; cultural blending within Muslim civilization and the spread and acceptance of Islam and the Arabic language
- Economics and Commerce
Growth of cities; establishment of trade routes among Asia, Africa, and Europe; the products and inventions that traveled along these routes - e.g., spices, textiles, paper, steel, new crops; role of merchants in Arab society
- Cultural Contributions
Intellectual exchanges among Muslim scholars of Eurasia and Africa; contributions Muslim scholars made to later civilizations in the areas of science, geography, mathematics, philosophy, medicine, art, and literature

China in the Middle Ages

- Reunification
Reunification of China under the Tang Dynasty; reasons for the spread of Buddhism in Tang China, Korea, and Japan
- Economics
Agricultural, technological, and commercial developments during the Tang and Sung periods
- Confucianism
Influences of Confucianism; changes in Confucian thought during the Sung and Mongol periods
- Trade and Commerce
Importance of both overland trade and maritime expeditions between China and other civilizations in the Mongol Ascendancy and Ming Dynasty
- Discoveries and Inventions
Historic influence of such discoveries as tea, the manufacture of paper, wood-block printing, the compass, and gunpowder
- Imperial State
Development of the imperial state and the scholar-official class

Ghana and Mali in Medieval Africa

- Niger River
Location and importance; relationship of vegetation zones of forest, savannah, and desert to trade in gold, salt, food, and slaves; growth of the Ghana and Mali empires
- Development of States and Cities
Importance of family, labor specialization, and regional commerce in the development of states and cities in West Africa
- Trans-Saharan Caravan Trade
Its role of the in the changing religious and cultural characteristics of West Africa; influence of Islamic beliefs, ethics, and law
- Language
Growth of the Arabic language in government, trade, and Islamic scholarship in West Africa
- Written and Oral Traditions
Their importance in the transmission of African history and culture

Medieval Japan

- Influences
Significance of Japan's proximity to China and Korea; intellectual, linguistic, religious, and philosophical influence of those countries on Japan
- Prince Shotoku
Reign of Prince Shotoku of Japan; characteristics of Japanese society and family life during his reign
- Lord-Vassal System
Values, social customs, and traditions prescribed by the lord-vassal system consisting of shogun, daimyo, and samurai; lasting influence of the warrior code in the twentieth century
- Buddhism
Development of distinctive forms of Japanese Buddhism
- Golden Age
Ninth and tenth centuries' golden age of literature, art, and drama; its lasting effects on culture today, including Murasaki Shikibu's Tale of Genji
- Military Society
Rise of a military society in the late twelfth century; role of the samurai in that society

Medieval Europe

- Geography
Geography of Europe and the Eurasian land mass; its location, topography, waterways, vegetation, and climate and their relationship to ways of life in Medieval Europe
- Christianity
Spread of Christianity north of the Alps; roles played by the early church and by monasteries in its diffusion after the fall of the western half of the Roman Empire

- Feudalism
Development of feudalism; its role in the medieval European economy; the way in which it was influenced by physical geography - the role of the manor and the growth of towns; how feudal relationships provided the foundation of political order
- Popes and Kings
Conflict and cooperation between the Papacy and European monarchs - e.g., Charlemagne, Gregory VII, Emperor Henry IV
- English Law
Significance of developments in medieval English legal and constitutional practices; their importance in the rise of modern democratic thought and representative institutions - Magna Carta, parliament, development of habeas corpus, an independent judiciary in England
- Crusades
Causes and course of the religious Crusades; their effects on the Christian, Muslim, and Jewish populations in Europe; the increasing contact by Europeans with cultures of the Eastern Mediterranean world
- Bubonic Plague
Spread of the bubonic plague from Central Asia to China, the Middle East, and Europe; its impact on global population
- The Catholic Church
Importance of the Catholic church as a political, intellectual, and aesthetic institution - founding of universities, political and spiritual roles of the clergy, creation of monastic and mendicant religious orders, preservation of the Latin language and religious texts, St. Thomas Aquinas's synthesis of classical philosophy with Christian theology, concept of "natural law"
- The Reconquista
History of the decline of Muslim rule in the Iberian Peninsula that culminated in the Reconquista and the rise of Spanish and Portuguese kingdoms

Meso-American and Andean Civilizations

- Geography
Locations, landforms, and climates of Mexico, Central America, and South America; their effects on Mayan, Aztec, and Incan economies, trade, and development of urban societies
- Social Structures
Roles of people in each society; class structures, family life, war-fare, religious beliefs and practices, slavery
- Rise and Fall of Empires
How and where each empire arose; how the Aztec and Incan empires were defeated by the Spanish
- Culture
Artistic and oral traditions; architecture in the three civilizations
- Achievements
Meso-American achievements in astronomy and mathematics; development of the calendar; Meso-American knowledge of seasonal changes to the civilizations' agricultural systems

The Renaissance

- Humanism
How the revival of classical learning and the arts fostered a new interest in humanism - i.e., a balance between intellect and religious faith
- Growth of Cities
Importance of Florence in the early stages of the Renaissance; growth of independent trading cities - e.g., Venice; cities' importance in the spread of Renaissance ideas
- Silk Road
Effects of the reopening of the ancient "Silk Road" between Europe and China; Marco Polo's travels and the location of his routes
- Spread of Information
Growth and effects of new ways of disseminating information - e.g., the ability to manufacture paper, translation of the Bible into the vernacular, printing
- Arts and Sciences
Advances made in literature, the arts, science, mathematics, cartography, engineering, and the understanding of human anatomy and astronomy; Dante Alighieri, Leonardo da Vinci, Michelangelo di Buonarroti Simoni, Johann Gutenberg, William Shakespeare

The Reformation

- Causes
Causes for the internal turmoil in and weakening of the Catholic church; tax policies, selling of indulgences
- Important People
Theological, political, and economic ideas of the major figures during the Reformation - Desiderius Erasmus, Martin Luther, John Calvin, William Tyndale
- Democratic Ideas
Protestants' new practices of church self-government; influence of those practices on the development of democratic practices and ideas of federalism
- Divided Europe
Location of European regions that remained Catholic and those that became Protestant; how the division affected the distribution of religions in the New World
- Counter-Reformation
How the Counter-Reformation revitalized the Catholic church; the forces that fostered the movement - St. Ignatius of Loyola and the Jesuits, the Council of Trent
- Spread of Christianity
Institution and impact of missionaries on Christianity; diffusion of Christianity from Europe to other parts of the world in the medieval and early modern periods; location of missions on a world map
- Golden Age in Spain
Golden Age of cooperation between Jews and Muslims in medieval Spain that promoted creativity in art, literature, and science; how that cooperation was terminated by the religious persecution of individuals and groups - the Spanish Inquisition and the expulsion of Jews and Muslims from Spain in 1492

The Scientific Revolution

- Origins
Roots of the Scientific Revolution - Greek rationalism; Jewish, Christian, and Muslim science; Renaissance humanism; new knowledge from global exploration
- New Theories and Inventions
Significance of the new scientific theories - those of Copernicus, Galileo, Kepler, Newton; significance of new inventions - telescope, microscope, thermometer, barometer
- Science in Society
Scientific method advanced by Bacon and Descartes; influence of new scientific rationalism on the growth of democratic ideas; coexistence of science with traditional religious beliefs

The 16th, 17th and 18th Centuries

- World Exploration
Great voyages of discovery; the locations of the routes; influence of cartography in the development of a new European worldview
- Exchange of Goods and Ideas
Exchanges of plants, animals, technology, culture, and ideas among Europe, Africa, Asia, and the Americas in the fifteenth and sixteenth centuries; major economic and social effects of this exchange on each continent
- Early Capitalism
Origins of modern capitalism; the influence of mercantilism and cottage industry; the elements and importance of a market economy in seventeenth-century Europe; the changing international trading and marketing patterns, including their locations on a world map; influence of explorers and map makers
- Sources of the Enlightenment
How the main ideas of the Enlightenment can be traced back to such movements as the Renaissance, the Reformation, and the Scientific Revolution and to the Greeks, Romans, and Christianity
- Democratic Philosophers
How democratic thought and institutions were influenced by Enlightenment thinkers - e.g., John Locke, Charles-Louis Montesquieu, American founders
- Importance of Magna Carta
How the principles in the Magna Carta were embodied in such documents as the English Bill of Rights and the American Declaration of Independence

Grade Seven Health

Positive Health Practices and Relevant Health Care

- Dietary Guidelines
- Reducing Risk of Cancer
- Reducing Risk of Heart Disease

Individual Influence on Health and Wellbeing

- Individual Influence at School
- Individual Influence on the Workplace
- Individual Influence on the Community

Actions on Body Systems

- Fad Diets
- Orthodontics
- Smoking, Drugs, & Alcohol

Addressing Interpersonal Differences Without Harm

- Avoidance
- Compromise
- Cooperation

Sex

- Sexually Transmitted Diseases
- Sexual Intimacy

Sexual Violence

- Sexual Harassment
- Partner or Domestic Violence
- Gender Discrimination
- Harmful Practices

Gang Resistance

- Similarities & Differences
- Respecting Others

Myths and Facts About Human Sexuality

- Regarding Pregnancy
- Regarding Sexual Orientation
- Other

Grade Seven Character Development

Character Awareness

- Transformative Experiences – a significant turning point in one’s personal development; a defining moment in time that shapes the direction of an individual’s life from that point forward.

Identify factors that influence transformative experiences:

- Personal struggles/triumphs
- Religious/near-death encounters
- Spontaneous revelations
- Disciplined efforts and intention

Recognize that many people do not experience this defining moment in their lifetime – a valid explanation for many of the breakdowns in our society.

- Identify people in your life who have undergone a transformative experience or defining moment:
 - How did they speak of this turning point?
 - How did it make you feel to learn of this experience?
- Character Arc – a significant shift in personal growth, sometimes unwilling, often brought about by a series of challenges and choices that ultimately shape a person’s character.

What character arc reveals:

- Distinguishes between one’s past and future outlooks
- Establishes level of reasoning and personal responsibility
- Invokes a learning process whereby individuals grow from experience

Discuss books or movies that involve a character arc. Examine character flaws (lack of courage, inability to love, lack of ethics) that were overcome throughout the course of the story.

Levels of Awareness

- Desire

Desire – as a level of personal awareness – refers to addiction, craving and lust for money, approval, fame or similar outcomes.

* Recognize that “desire” is not always a negative emotion. Example: Desire can serve an important purpose in setting and achieving goals.

- Anger

Anger is a level characterized by frustration, often a result of not having desires met at the lower level. This level can either inspire individuals to take action and attain higher levels of awareness or trap people in a constant state of hatred.

* Recognize that “anger” is not always a negative emotion. Example: Anger can motivate individuals to be assertive and express their feelings about an unacceptable situation.

Character in Action

- Desire: In this level, individuals are experiencing forms of addiction where cravings become more important than life itself. Examples can include drug use, smoking, alcohol as well as materialism. Similar feelings of want, however, can inspire individuals in this level to pursue achievements which may lead them to higher levels of awareness.
- Anger: In this level, wants that go unmet can lead to frustration that materializes as anger. Effects include feelings of resentment, revenge and hatred. These feelings can affect many other aspects of a person's life.
- Extend the discussion of desire and anger, identifying examples of people stuck in these levels and examining possible outcomes. Evaluate how the two levels are connected and consider how an individual can move past these stages of awareness.

Grade Seven Critical Thinking

What is Critical Thinking?

- Critical thinking can be defined in many ways including the following:
 - an improvement in one's thinking that includes standards for evaluating thought
 - a higher level of thinking and problem solving based on reason, evidence and the nature of individual circumstances
 - self-directed, self-disciplined, self-monitored and self-corrective thinking
- Critical thinking enables meaningful learning and life experience by strengthening one's ability to:
 - analyze, criticize and support ideas
 - pay attention to detail
 - evaluate personal perspective
 - consider different perspectives
 - develop a clear understanding of a topic
 - identify trends and predict outcomes
 - logically reason and evaluate information
 - form strong conclusions

*These critical thinking abilities help guide people in decisions and judgments in personal relationships, school, work and society.
- Why do we need critical thinking?
Without critical thinking, individuals would never question messages conveyed in:
 - Television commercials
 - Corporate agendas

- Political statements
- Written materials (textbooks, magazines, newspapers, etc.)
*Discussion topic: What are some messages you have encountered that you believe are false or misleading? What led you to question their validity?

Critical Reading and Writing

- Critical reading and writing allow text to be evaluated for what it says, how it says it and what it means.

Critical readers examine different points of view with an open mind, evaluate their own position on the subject and make conclusions about the reading itself.

Critical readers ask themselves the following questions while they read:

- What am I asked to think or believe? Is it reasonable?
- What evidence is used to persuade me? Is it relevant and reliable?
- Is the available evidence convincing? Is there information that appears to be missing?

Critical writers present conclusions in a logical, clear manner to persuade others about a topic.

- Writers must adequately address the above questions – essentially, to be a critical writer, one must first be a critical reader
- Writers must focus on presenting ideas and concepts to convey meaning
- Writers must also concentrate on how ideas are presented – sentence structure, punctuation and grammar all influence how a reader interprets text

Grade Seven Interpersonal Relationships

Romantic Relationships

- Relationship Events

Romantic relationships typically include the following sequence of events:

- Meeting/Bonding – the stage where individuals meet and form a mutual attraction
- Courtship/Dating – the stage where individuals spend time together and learn about each other
- Commitment – the stage where individuals dedicate themselves to the other person
- Break Up or Marriage – the stage where the relationship is dissolved (in a break up) or permanently solidified (in a marriage)

- Gender Differences

Men and women have significant social and biological differences that can affect a romantic connection.

Gender differences can impact the following major areas of a relationship:

- Feelings:

Men often do not identify or share their own emotions as easily as women do; they tend to want to share what they know (ideas, concepts and theories over fears, feelings and experiences)

- Independence:

Men tend to desire a greater amount of independence than women do; women tend to desire a stronger connectedness and may not understand men's need for space

- Competition:

Men tend to be more competitive than women, largely due to social influences of boyhood games where there is an emphasis on winning; women are more likely to sacrifice winning in order to keep the peace

- Future:

Men tend to focus on plans for the future and problem solving; women tend to want to focus on current feelings and experiences to build emotional bonds

Grade Seven Cultural Literacy – Art, Architecture & Music

Introduction to Cultural Literacy

- What is cultural literacy?

Cultural literacy is prior knowledge of background information that allows us to be competent readers, listeners and learners (prior knowledge of significant people, places, events, etc.)

- Why is cultural literacy important?

Cultural literacy enables:

- Effective communication – it provides context to express and interpret meaning
- Political and social change – it allows people to understand values and make decisions
- Greater equality among learners – it provides critical background knowledge required for strong reading, writing and communication

- Areas of cultural literacy:

Cultural literacy requires a common knowledge of many academic topics including history, politics, geography, myth and religion, quotes and phrases, literature, science and technology and current events.

Additional areas of cultural literacy include:

- Art

- Architecture
- Music

Grade Seven Health & Wellness

Drug Abuse

- What are drugs? What characterizes drug abuse?

Drugs are substances that alter normal bodily function; these include legal medicines, alcohol, tobacco and illegal drugs. "Drug abuse" typically refers to the use of illegal drugs such as marijuana, ecstasy, cocaine, LSD, crystal meth and heroin. Misuse of prescription drugs also indicates drug abuse.

- Dangers of illegal drugs
 - Physical damage to the brain, heart and other bodily organs (this damage can be especially severe for kids and teens that have not yet reached their full physical development)
 - Poor decision making (unclear thinking can lead to dangerous, reckless behavior)
 - Addiction (individuals can become dependent on the drug and unable to function well without it)
- Why people use drugs:
 - To fit in (with a group of friends, peers, etc.)
 - Curiosity or boredom
 - Escape from reality
- Signs of drug use:
 - Loss of interest in school
 - Changing group of friends
 - Mood swings, negative attitude, excessive worrying
 - Desire to be alone a lot
 - Difficulty concentrating
 - Excessive sleep
 - Tendency to get in fights
 - Red or puffy eyes
 - Change in body weight
 - Persistent cough and runny nose

- Treatment

There are many options available to assist people suffering with drug problems including individual and group therapy and rehabilitation programs.

Additional information is available through the Substance Abuse and Mental Health Services Administration's National Drug and Alcohol Treatment Service at 1-800-662-HELP (4357) or www.findtreatment.samhsa.gov.

Addiction

- What is addiction?

Addiction is being abnormally tolerant to and dependent on something that is psychologically or physically habit-forming.

- What is a twelve-step program?

A twelve-step program is a set of guiding principles outlining a course of action for recovery from addiction or other behavioral problems.

The twelve-step process involves the following goals:

- admitting lack of control over one's addiction or compulsion
- recognizing a greater power that can give strength
- examining past errors with the help of a sponsor (experienced mentor)
- making amends for these errors
- learning to live a new life with a new code of behavior
- helping others that suffer from the same addictions or compulsions

Grade Seven Home Skills

Home & Property Management

- Cleaning House

Daily Cleaning Tasks:

- Make beds
- Wipe kitchen counters
- Disinfect kitchen sink
- Empty trash

Weekly Cleaning Tasks:

- Clean bathroom (from top to bottom – mirrors, sinks, toilets, shower/tub, floors)

- Vacuum carpets and hard flooring
- Dust furniture and electronic equipment throughout home
- Clean kitchen (counters, sink, stovetop, appliances, floors)

Periodic Cleaning Tasks (Every 6 to 8 weeks):

- Clean cupboards – inside and out
- Clean the oven
- Polish delicate items and fixtures
- Clean windows
- Deep clean shower/tub grout

Occasional Cleaning Tasks:

- Vacuum underneath furniture
- Wipe down baseboards, doors and frames
- Clean light fixtures, ceiling fans
- Shampoo carpets and polish hard floors
- Clean window coverings
- Clean appliances including filters
- Clean out bathroom cupboards and clothes closets
- Flip bed mattresses

Essential Cleaning Products:

- Liquid bleach: kills germs and eliminates grease; should be diluted with water (1 part bleach to 4 parts water); surfaces must be rinsed after use
- Powder bleach: abrasive cleanser for hard, scratch-resistant materials; surfaces must be rinsed after use
- Liquid disinfectant: kills germs on surfaces
- Multi-surface cleaners: a cleaning agent that combines detergent and water softener; usually does not require rinsing after use
- Anti-bacterial cleaners: products that clean and disinfect while destroying bacteria that can cause food poisoning
- Natural/homemade cleaning options: lemon, baking soda, vinegar

• Laundry:

- Prepping laundry for washing machine:
 - Read instructions for washing machine and care labels on clothing
 - Empty pockets and remove any loose buttons or threads
 - Sort clothes by color (dark or bright colors can bleed onto lighter items if combined in the washing machine)
 - Put smaller, delicate items in mesh, zippered lingerie bags
 - Use an appropriate detergent – consider your skin type and sensitivities and whether your machine requires specialty detergent
 - Pre-treat stains with warm or cold water (hot water can set stains) or use a commercial stain remover product
- Running loads of laundry:

- Run separate loads for different fabric types (one load for towels, one load for sheets)
- Set machine to the lowest temperature that can effectively clean clothes
- Only wash full loads of laundry but do not *overflow* the machine, as it may damage the machine or the items being washed

Food Management

- Kitchen Essentials: set up an organized kitchen that is functional for storage, food preparation, cooking, eating and cleaning.

A well-stocked kitchen typically contains the following items:

- Small appliances: toaster, blender, coffeemaker, mixer
- Large appliances: microwave, oven, refrigerator and freezer, dishwasher
- Tools and utensils: can opener, cutting board, colander, measuring cups and spoons, knives, pots and pans, peeler, whisks, mixing bowls
- Tableware: dishes, flatware, serving utensils, glasses

Emergencies

- Emergency Preparedness: it is important to deal with emergencies in the home calmly and effectively. This can be accomplished by gearing yourself with knowledge of your surroundings and preparing for various circumstances.

- Safety essentials

Have the following items in your home in case of fire, water, gas or electrical problems:

- Smoke alarms
 - Fire extinguisher
 - Carbon monoxide detectors
 - Flashlights
 - Emergency numbers near telephone
 - Clearly visible outdoor house/address number
- Fires
 - Kitchen (grease) fires: do not move a smoking pan or throw water on it as the fire will spread; turn off the stove or burner if possible; smother pan with a damp

cloth or large lid; if fire becomes uncontrollable, follow the following steps for a house fire

- House fires: ensure every room has an escape route and identify an evacuation plan: get everyone out of the house immediately; do not stop for possessions or to look for pets; close doors behind you; if you are trapped in a room, place a blanket or towel (ideally wet) at the bottom of door; go to the window and call for help; do not jump from an upstairs room unless your life is threatened; if you must escape from an upstairs room, throw a mattress out of the window to break your fall
- Electrical fires: turn off every appliance and unplug them; use a dry powder fire extinguisher to put out the fire (never use water); smother fire with a heavy blanket or rug
- Floods
 - Turn off all gas, electricity and water supplies at the main switches, using only *dry* hands to do so
 - If possible, block exterior doors with sandbags or plastic bags filled with soil
 - Lift up carpets; move valuables
- Tornadoes
 - In the case of a tornado warning, the safest area of the house is in a basement; otherwise, a center hallway or bathroom on the lowest floor (a room far away from windows)
- Earthquakes
 - Move away from windows; take cover under a desk or table to protect against head injuries in case of collapse; internal doorways can also provide some protection in an earthquake
- Additional information on specific disaster preparedness including emergency plans and kits is available at: <http://www.redcrosslv.org/disaster/materials.html>

Grade Seven Study Skills

Active Listening

- What is active listening?

The ability to listen for detail, follow directions and evaluate what is heard – good listening is one of the most important skills a learner can develop in school and for the rest of their life

- To become a better listener, it is important to engage in discussions in active ways including:
 - Look directly at the speaker
 - Do not talk or do other things while listening to the speaker
 - Write a list of main ideas about the discussion
 - Generate a list of questions the discussion addresses
 - List details to support a point of view

Time Management

- To avoid last minute frustrations about assignments, students should practice effective time management techniques including:
 - Establish a study schedule for upcoming tests
 - Study at designated times
 - Study earlier in the day (before dinner) whenever possible
 - Use a calendar for recording due dates and setting weekly goals
 - Break large assignments into smaller parts and set deadlines for each section

Eighth Grade

Free World U

Grade Eight Language Arts

Writing Sentences

- Using Parallel Structure
Review
- Eliminating Extraneous Information
Review
- Correcting Subject-Verb Agreement Problems
Review
- Problems with Pronoun Case and Agreement
Review

Creating Emphasis

- Creating Emphasis in Sentences
Annotation
- Creating Emphasis in Paragraphs and Essays
Shows students how to emphasize important information in paragraphs and essays by using organizational features, vocabulary choices, and sentence structure
- Your Turn: Writing a Persuasive Essay
Flashcards remind students to present a clear thesis backed up with detailed evidence and examples to support their positions. Students will anticipate and answer counterarguments

Writing About Literature

- Using Literary Terms
*Introduces students to the vocabulary they need to write responses to literature
Vocabulary includes: characterization, conflict, dialogue, imagery, point of view, symbolism, and tone*
- Reading Critically
Shows students how to read critically in order to write a response to literature rather than for research or enjoyment
- Writing about Fiction
Covers strategies for writing about fiction; includes writing prompts and how to respond
- Using Examples for a Text
Shows students how to use examples from a text to support their ideas in a response to literature
- Literal Meaning vs. Figurative Meaning
Practice with these important terms

Thinking About Literature

- Comparing Literature
Students will compare and contrast two pieces, looking at the similarities and differences between characters from different historical periods facing similar situations

- Critiquing Literature
Examining the coherence, logic, and internal consistency of text
- Evaluating the Critics
Students read a short piece and evaluate different summaries of the text to determine whether the writers have accurately relayed the main ideas and underlying meaning of the original text
- Sayings
Never the twain shall meet. Off the record. Rule of thumb

The Novel of Choice

- Background Information
A discussion of the novel's author and time period in which the book was written
- Before You Read
Students answer a series of questions designed to help them to purposefully and critically read the chosen novel
- Your Turn: Writing About The Novel of Choice
Using the novel just read, students will write a meaningful essay. Flashcards remind students of how to write the essay. Assignment is to write about the structural elements of the plot, the characters and their motivations, the setting, particularly the time period and customs therein, themes, and recurring literary devices. Students will carefully edit their work

Reading

- Types of Fiction
Extensive lesson about the characteristics and genres of fiction
- Types of Nonfiction
Extensive lesson about nonfiction

Reading Drama

- Characterization
Shows students how to look for information about characters in dialogue, narration, etc
- Dialogue
Shows students how to use dialogue to learn more about characters, plot, setting, etc
- Drama Subgenres
Introduces students to tragedy and comedy; includes characteristics and examples of each
- Understanding Historical Perspective
Using plays shows students how cultural and current events affect literature. Explains to students how to use historical perspective to draw conclusions about literature
- Reading a Drama
Students read a short play and answer questions about the action, characterization, etc

Poetry

- Characteristics of Free Verse
Free verse has no set line length, rhyme scheme or rhythm pattern but does have a certain flow. Free verse is a way of sharing ideas and feelings
- Reading Free Verse
Shows students examples of free verse poetry, and how to identify poetic devices in free verse
- Your Turn: Writing in Free Verse
Flashcards remind students to use vivid words and alliteration, assonance, internal rhyme, and/or onomatopoeia. Assignment to students is to write a free verse poem
- Forms of Poetry
Reviews the purposes and characteristics of ballads, lyrics, couplets, epics, elegies, odes, and sonnets
- Your Turn: Reciting Poetry
Student selects a poem of four to six stanzas and gives a formal recitation. Student varies his vocal presentation and uses gestures appropriately

Problems in Writing

- False Analogies
Shows students how to identify, avoid, and revise false analogies in their writing
- Drawing False Conclusions
Shows students how to identify and revise false conclusions in their writing
- Presenting Information in an Illogical Manner
Shows students how to present the information in their essays in a logical manner. Gives examples of mistakes and how to correct them
- You're the Editor
Includes sentences that need to be revised for any of the problems that have already been introduced, including grammar and capitalization problems. Also includes examples where sentences need to be revised because they are too repetitive

Strategies for Active Reading

- Determine Purpose for Reading
Shows students how determining a purpose for reading can help them get the most out of what they read. Shows students how to determine a purpose for reading using clues from the text
- Scanning for Details
Shows students how to scan a text for details to determine if a text is relevant to their research or interests
- Highlighting Important Details
Explains to students how to determine what information in a text is worth noting
- Taking Notes
Explains to students how to take effective notes while reading a text

- Asking Questions as you Read
Shows students how to ask relevant questions as they read to get the most out of a text, including questions about proposition and support
- Summarizing and Reviewing
Shows students how to summarize what they read
- Studying Images
Students will study a variety of visual images, including graphics, illustrations, and photographs to determine the ways images communicate information and influence opinions

Writing Research Papers

- MLA Format
Teaches the basics of MLA format
- Paraphrasing and Using Direct Quotes
How to decide between them, and how to punctuate and use both properly
- Citing References
How to and when to
- Footnotes and Bibliographies
Shows students how to use them properly
- Creating a Chart or Graph
Finding relevant information in your research that can be made into a chart or graph to aid the reader's understanding of your report
- Your Turn: Write a Research Paper
Flashcards review the elements of a research paper. Assignment to students is to write the paper

Biographies and Autobiographies

- Biographies and Autobiographies
Covers the characteristics of each
- Interviewing for Biographical Information
Teaches interviewing and note-taking skills in preparation for an assignment to write a biography
- Converting Notes into an Essay
Teaches how to go from notes to a real story
- Your Turn: Write a Biography
Students will write a biographical sketch of the person they've interviewed. They emphasize relevant information, use physical descriptions, and maintain strong organization

Reading Documents and Instructions

- Warranties and Contracts
Provides experience in reading and understanding simple product warranties and contracts

- Reading Documents
Students use how-to materials and public documents to solve problems
- Reading Technical Directions
Student gains practice in understanding and explaining how to do something by following technical directions
- Your Turn: Giving Technical Directions
Flashcards show students to identify a sequence of steps needed to operate a tool or some sort of technical device. A second option is to explain the bylaws of a club or organization, such as Boy Scouts, that they belong to

Business Writing

- Introduction to Business Writing
Introduces students to job applications and letters of inquiry
- Your Turn: Write a Letter of Inquiry
Students will write a clear, polite letter asking for an interview for a position. Students will properly format the letter

Spelling

- Spelling
A brush-up for students on spelling “demons,” the most-commonly misspelled words in the language

Vocabulary

- English Language History
Explains the most important points in the history of English language and uses common word origins to show the historical influences on English words
- Analogies
Defines analogies and invites students to practice the technique
- Oxymoron
Defines an oxymoron and presents some well-known ones: bittersweet, steel wool, original copy, larger half, etc
- Context
Figuring out the meaning of words using context clues
- Literacy Vocabulary
Extensive list of vocabulary including figurative language, personification, hyperbole, and many others

Listening

- Analyzing Responses to Literature
Students will listen to short oral reports about literature and evaluate the speaker’s purpose, choice of language, delivery, and the effect the reports are likely to have on listeners
- Analyzing Responses to Speeches
Students will listen to short oral reports on a variety of topics and evaluate the speaker’s credibility. They will listen for hidden agendas, bias, and slant

Speaking

- Adapting to your Audience
Making a formal business-type presentation vs. talking to friends informally
- Your Turn: Presenting a Biography
Students will convert their biography report into a speech. They will give a clear presentation, sharing events from the subject's life and relating the importance of said events. Students will use descriptive words and strong verbs to hold the attention of the audience
- Your Turn: Telling About a Book
Students will summarize a favorite book and share their reactions to the book, backing up their impressions with material from the book
- Your Turn: Presenting your Research Report
Students will convert their research report into a series of note cards which they will deliver in an effective way. They will cite sources in an appropriate manner, use direct quotations when useful, and effectively use a visual aid. The audience here is defined as a formal gathering of adults
- Your Turn: Delivering a Persuasive Speech
Students will write and deliver a speech about a favorite hobby or pastime with the goal of persuading others to try it. They will write a strong thesis, give detailed evidence and examples and differentiate between fact and opinion

Algebra I

Algebra Basics

- Using Arithmetic Properties
Identify and use the arithmetic properties of subsets of integers and rational, irrational, and real numbers, including closure properties for the four basic arithmetic operations where applicable
- True and False Assertions
Use properties of numbers to demonstrate whether assertions are true or false
- Understanding and Using Operations
Understand and use such operations as taking the opposite, finding the reciprocal, taking a root, and raising to a fractional power; understand and use the rules of exponents

Linear Equations and Inequalities

- Simplifying Expressions
Simplify expressions before solving linear equations and inequalities in one variable, such as $3(2x-5) + 4(x-2) = 12$
- Solving Multistep Linear Equations
Solve multistep problems involving linear and provide justification for each step
- Solving Multistep Linear Inequalities
Solve multistep problems involving linear inequalities in one variable and provide justification for each step

- Solving Multistep Word Problems (Equations)
Solve multistep problems word problems involving linear equations in one variable and provide justification for each step
- Solving Multistep Word Problems (Inequalities)
Solve multistep problems word problems involving linear inequalities in one variable and provide justification for each step
- Solving Equations With Absolute Value
Solve equations involving absolute values
- Solving Inequalities With Absolute Value
Solve inequalities involving absolute values
- Linear Equation Graphs
Graph a linear equation and compute the x- and y- intercepts (e.g., graph $2x + 6y = 4$).
- Linear Equality Graphs
Sketch the region defined by linear inequality (e.g., they sketch the region defined by $2x + 6y < 4$)
- Point-Slope Formula
Derive linear equations by using the point-slope formula; verify that a point lies on a line, given an equation of the line
- Related Slopes
Understand the concepts of parallel lines and perpendicular lines and how those slopes are related; find the equation of a line perpendicular to a given line that passes through a given point
- Solving for Two Linear Equations
Solve a system of two linear equations in two variables algebraically and interpret the answer graphically; solve a system of two linear inequalities in two variables and to sketch the solution sets

Polynomials

- Working With Polynomials
Add, subtract, multiply, and divide monomials and polynomials; solve multistep problems, including word problems, by using these techniques
- Factoring Polynomials
Apply factoring techniques to second-and simple third-degree polynomials, including find a common factor for all terms, recognize the difference of two squares, recognize perfect squares of binomials
- Simplifying Fractions With Polynomials
Simplify fractions with polynomials in the numerator and denominator by factoring both and reducing them to the lowest terms

Relations and Functions

- Relations and Functions
Understand the concepts of a relation and a function, determine whether a given relation defines a function, and give pertinent information about given relations and functions
- Analyzing and Justifying

Determine whether a relation defined by a graph, a set of ordered pairs, or a symbolic expression is a function and justify the conclusion

Rational Expressions and Functions

- Rational Expressions and Functions
Add, subtract, multiply, and divide rational expressions and functions; solve both computationally and conceptually challenging problems by using these techniques

Quadratic Equations and Functions

- Quadratic Formula
Know the quadratic formula and be familiar with its proof by completing the square
- Solving Quadratic Equations
Solve a quadratic equation by factoring or completing the square
- Quadratic Formula and Roots
Use the quadratic formula to find the roots of a second-degree polynomial and to solve quadratic equations
- Graphing Quadratic Functions
Graph quadratic functions and know that their roots are the x- intercepts
- Quadratic Functions and Graphs
Use the quadratic formula or factoring techniques or both to determine whether the graph of a quadratic function will intersect the x-axis in zero, one, or two points
- Application of Quadratic Equations
Apply quadratic equations to physical problems, such as the motion of an object under the force of gravity

Domain and Range

- Finding Domain and Range
Determine the domain of independent variables and the range of dependent variables defined by a graph, a set of ordered pairs, or a symbolic expression

Algebraic Logic and Reasoning

- Aspects of a Logical Argument
Use and know simple aspects of a logical argument
- Inductive and Deductive Reasoning
Explain the difference between inductive and deductive reasoning and identify and provide examples of each
- Hypothesis and Conclusion
Identify the hypothesis and conclusion in logical deduction.
- Counterexamples
Use counterexamples to show that an assertion is false and recognize that a single counterexample is sufficient to refute an assertion
- Properties of the Number System
Use properties of the number system to judge the validity of results, to justify each step of a procedure, and to prove or disprove statements

- Properties of Numbers
Use properties of numbers to construct simple, valid arguments (direct and indirect) for, or formulate counterexamples to, claimed assertions
- Validity of an Argument
Judge the validity of an argument according to whether the properties of the real number system and the order of operations have been applied correctly at each step
- Analyzing an Algebraic Statement
Given a specific algebraic statement involving linear, quadratic, or absolute value expressions or equations or inequalities, determine whether the statement is true sometimes, always, or never

Applying Algebra Concepts

- Algebra in Life
Apply algebraic techniques to solve rate problems, work problems, and percent mixture problems

Grade Eight Science

Motion

- Position
Students know position is defined in relation to some choice of a standard reference point and a set of reference directions
- Average Speed
Students know that average speed is the total distance traveled divided by the total time elapsed and that the speed of an object along the path traveled can vary
- Solving Motion Problems
Students know how to solve problems involving distance, time, and average speed
- Velocity
Students know the velocity of an object must be described by specifying both the direction and the speed of the object; changes in velocity may be due to changes in speed, direction, or both
- Interpreting Motion Graphs
Students know how to interpret graphs of position versus time and graphs of speed versus time for motion in a single direction

Forces

- Introduction to Forces
Students know a force has both direction and magnitude; when an object is subject to two or more forces at once, the result is the cumulative effect of all forces
- Identifying Forces
Students know how to identify separately the two or more forces that are acting on a single static object, including gravity, elastic forces due to tension or compression in matter, and friction
- Balance of Forces

When the forces on an object are balanced, the motion of the object does not change; when the forces on an object are unbalanced, the object will change its velocity and/or direction

- Forces and Mass
Students know the greater the mass of an object, the more force is needed to achieve the same rate of change in motion
- Force of Gravity
Students know the role of gravity in forming and maintaining the shapes of planets, stars, and the solar system

Structure of Matter

- Structure of the Atom
Students know the structure of the atom and know it is composed of protons, neutrons, and electrons
- Chemical Compounds
Compounds are formed by combining two or more different elements; compounds have properties that are different from their constituent elements; use the periodic table to identify elements in compounds
- Forming Solids
Students know atoms and molecules form solids by building up repeating patterns, such as the crystal structure of NaCl or long-chain polymers
- Motion of Molecules
States of matter depend on molecular motion; (solids: atoms closely locked, only vibrate; liquids: atoms/molecules loosely connected, collide and move; gases: atoms/molecules free to move, colliding)

Earth in the Solar System

- Galaxies
Students know galaxies are clusters of billions of stars and may have different shapes
- Stars
The Sun is a star; stars differ in size, temperature, and color; stars are the source of light for all bright objects in space; the Moon and planets shine by reflected sunlight not by their own light
- Measures of Astronomical Distances
Students know how to use astronomical units and light years as measures of distances between the Sun, stars, and Earth
- Knowing Our Solar System
Students know the appearance, general composition, relative position and size, and motion of planets in the Solar System.
- Planetary Satellites, Asteroids, and Comets
Students know the appearance, general composition, relative position and size, and motion of planetary satellites, comets, and asteroids

Chemical Reactions

- Reactant Atoms and Molecules

Students know reactant atoms and molecules interact to form products with different chemical properties

- Atoms and Conservation of Matter
Students know the idea of atoms explains the conservation of matter: In chemical reactions the number of atoms stays the same no matter how they are arranged, so their total mass stays the same
- Chemical and Physical Reactions
Students know chemical reactions usually liberate heat or absorb heat; physical processes include freezing and boiling, in which a material changes form with no chemical reaction
- Types of Solutions
Students know how to determine whether a solution is acidic, basic, or neutral

Chemistry of Living Systems

- Carbon
Students know that carbon, because of its ability to combine in many ways with itself and other elements, has a central role in the chemistry of living organisms
- Molecules of Living Organisms
Students know that living organisms are made of molecules consisting largely of carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulfur
- Variety of Molecules
Students know that living organisms have many different kinds of molecules, including small ones, such as water and salt, and very large ones, such as carbohydrates, fats, proteins, and DNA

Periodic Table

- Regions of the Periodic Table
Students know how to identify regions corresponding to metals, nonmetals, and inert gases
- Atomic Numbers and Isotopes
Students know each element has a specific number of protons in the nucleus (the atomic number) and each isotope of the element has a different but specific number of neutrons in the nucleus
- Classification of Substances
Students know substances can be classified by their properties, including their melting temperature, density, hardness, and thermal and electrical conductivity

Density and Buoyancy

- Density
Students know density is mass per unit volume; know how to calculate the density of substances (regular and irregular solids and liquids) from measurements of mass and volume
- Buoyancy
Students know the buoyant force on an object in a fluid is an upward force equal to the weight of the fluid the object has displaced; know how to predict whether an object will float or sink

Investigation and Experimentation

- Planning and Conducting Investigation
Plan and conduct a scientific investigation to test a hypothesis; evaluate the accuracy and reproducibility of data; distinguish between variable and controlled parameters in a test
- Creating Scientific Graphs
Construct appropriate graphs from data and develop quantitative statements about the relationships between variables; distinguish between linear and nonlinear relationships on a graph of data n
- Interpreting Scientific Graphs
Recognize the slope of the linear graph as the constant in the relationship $y=kx$ and apply this principle in interpreting graphs constructed from data
- Applying Mathematics in Science
Apply simple mathematic relationships to determine a missing quantity, given the two remaining terms (speed = distance/time, density = mass/volume, force = pressure \times area, volume = area \times height)

Grade Eight Social Studies

Influences on American Democracy

- Influence of the Great Awakening
Relationship between the moral and political ideas of the Great Awakening and the development of revolutionary fervor
- Declaration of Independence
The philosophy of government expressed in the Declaration of Independence; government as a means of securing individual rights - e.g., key phrases such as "all men are created equal, that they are endowed by their Creator with certain unalienable Rights"
- International Effect
How the American Revolution affected other nations, especially France
- America's Ideals
Nation's blend of civic republicanism, classical liberal principles, and English parliamentary traditions

Principles of the U.S. Constitution

- Influences on the Constitution
Significance of the Magna Carta, the English Bill of Rights, and the Mayflower Compact
- Articles of Confederation and the Constitution
Contents of the Articles of Confederation and the Constitution; success of each in implementing the ideals of the Declaration of Independence
- Major Debates
Major debates that occurred during the development of the Constitution; their ultimate resolutions in such areas as shared power among institutions, divided state-federal power, slavery, rights of individuals and states (later addressed by the addition of the Bill of Rights), status of American Indian nations under the commerce clause
- Political Philosophy

Political philosophy underpinning the Constitution as specified in the Federalist Papers authored by James Madison, Alexander Hamilton, and John Jay; role of such leaders as Madison, George Washington, Roger Sherman, Gouverneur Morris, and James Wilson in the writing and ratification of the Constitution

- Separation of Church and State
Significance of Jefferson's Statute for Religious Freedom as a forerunner of the First Amendment; origins, purpose, and differing views of the founding fathers on the issue of the separation of church and state
- Powers and Liberty
The powers of government set forth in the Constitution; the fundamental liberties ensured by the Bill of Rights
- Key Principles
Principles of federalism, dual sovereignty, separation of powers, checks and balances, the nature and purpose of majority rule, the ways in which the American idea of constitutionalism preserves individual rights

Foundation of the American Political System

- Role of Early State Constitutions
Principles and concepts codified in state constitutions between 1777 and 1781 that created the context out of which American political institutions and ideas developed
- Ordinances of 1785 and 1787
How the ordinances of 1785 and 1787 privatized national resources and transferred federally owned lands into private holdings, townships, and states
- Common Market
Advantages of a common market among the states as foreseen in and protected by the Constitution's clauses on interstate commerce, common coinage, and full-faith and credit
- Origins of the Two-Party System
How the conflicts between Thomas Jefferson and Alexander Hamilton resulted in the emergence of two political parties - view of foreign policy, Alien and Sedition Acts, economic policy, National Bank, funding and assumption of the revolutionary debt
- Domestic Resistance Movements
Their significance; ways in which the central government responded to such movements - Shays' Rebellion, the Whiskey Rebellion
- Participation of Citizens
Basic law-making process; how the Constitution provides numerous opportunities for citizens to participate in the political process and to monitor and influence government - function of elections, political parties, interest groups
- Free Press
Functions and responsibilities of a free press

Aspirations and Ideals of Early America

- Early American Landscape
Country's physical landscapes, political divisions, and territorial expansion during the terms of the first four presidents
- Famous Speeches

Policy significance of Washington's Farewell Address, Jefferson's 1801 Inaugural Address, John Q. Adams's Fourth of July 1821 Address

- Rise of Capitalism
Rise of capitalism and the economic problems and conflicts that accompanied it - Jackson's opposition to the National Bank; early decisions of the U.S. Supreme Court that reinforced the sanctity of contracts and a capitalist economic system of law
- Early American Life
Daily life; traditions in art, music, and literature, of early national America; writings by Washington Irving, James Fenimore Cooper

Foreign Policy in the Early Republic

- War of 1812
Political and economic causes and consequences of the War of 1812; major battles, leaders, and events that led to a final peace
- International Relations
Changing boundaries of the United States; relationships with its neighbors - current Mexico and Canada - and Europe; influence of the Monroe Doctrine; how those relationships influenced westward expansion and the Mexican-American War
- Treaties with Indian Nations
Major treaties with American Indian nations during the administrations of the first four presidents; varying outcomes of those treaties

America from 1800 to the Mid-1800's

- Industrialization
Influence of industrialization and technological developments on the region; human modification of the landscape; how physical geography shaped human actions - growth of cities, deforestation, farming, mineral extraction
- Roads, Canals, and Railroads
Economic and political factors involved in building a network of roads, canals, and railroads - Henry Clay's American System; physical obstacles to building this network
- Immigration
Reasons for the wave of immigration from Northern Europe to the United States; growth in the number, size, and spatial arrangements of cities; Irish immigrants and the Great Irish Famine
- Freed Slaves in the North
Lives of black Americans who gained freedom in the North and founded schools and churches to advance their rights and communities
- Education
Development of the American education system from its earliest roots; roles of religious and private schools; Horace Mann's campaign for free public education and its assimilating role in American culture
- Women's Suffrage
Women's suffrage movement; biographies, writings, and speeches of Elizabeth Cady Stanton, Margaret Fuller, Lucretia Mott, Susan B. Anthony
- Culture and Philosophy

Common themes in American art; transcendentalism and individualism; writings about and by Ralph Waldo Emerson, Henry David Thoreau, Herman Melville, Louisa May Alcott, Nathaniel Hawthorne, Henry Wadsworth Longfellow

The South from 1800 to the Mid-1800's

- Agrarian Economy
Development of the agrarian economy in the South; locations of the cotton-producing states; significance of cotton and the cotton gin
- Slavery
Origins and development of slavery; its effects on black Americans and on the region's political, social, religious, economic, and cultural development; strategies that were tried to both overturn and preserve it; writings and historical documents on Nat Turner, Denmark Vesey
- White Southern Society
Characteristics of white Southern society; how the physical environment influenced events and conditions prior to the Civil War
- Free Blacks in the North and South
Lives of and opportunities for free blacks in the North compared to those of free blacks in the South

The West from 1800 to the Mid-1800's

- Andrew Jackson
Election of Andrew Jackson as president in 1828; importance of Jacksonian democracy; his actions as president - the spoils system, veto of the National Bank, policy of Indian removal, opposition to the Supreme Court
- Westward Expansion
Purpose, challenges, and economic incentives associated with westward expansion; concept of Manifest Destiny; Lewis and Clark expedition; accounts of the removal of Indians; Cherokees' "Trail of Tears"; settlement of the Great Plains; territorial acquisitions that spanned numerous decades
- Pioneer Women
Role of pioneer women; the new status that western women achieved - Laura Ingalls Wilder, Annie Bidwell; slave women gaining freedom in the West; Wyoming granting suffrage to women in 1869
- Rivers and Water Rights
Importance of the great rivers; struggle over water rights
- Mexican Settlements
Their locations, cultural traditions, attitudes toward slavery, land-grant system, and economies
- Mexican-American War
Texas War for Independence; Mexican-American War; territorial settlements; the aftermath of the wars; and the effects the wars had on the lives of Americans; including Mexican Americans today

Early Attempts to Abolish Slavery

- Leaders of the Movement

John Quincy Adams and his proposed constitutional amendment; John Brown and the armed resistance; Harriet Tubman and the Underground Railroad; Benjamin Franklin; Theodore Weld; William Lloyd Garrison; Frederick Douglass

- State Constitutions
Abolition of slavery in early state constitutions
- First Limits on Slavery
Significance of the Northwest Ordinance in education; significance of the banning of slavery in new states north of the Ohio River
- Texas and California
Importance of the slavery issue as raised by the annexation of Texas and California's admission to the union as a free state under the Compromise of 1850
- Milestones in the Fight over Slavery
Significance of the States' Rights Doctrine; the Missouri Compromise (1820); the Wilmot Proviso (1846); the Compromise of 1850; Henry Clay's role in the Missouri Compromise and the Compromise of 1850; the Kansas-Nebraska Act (1854); the Dred Scott v. Sandford decision (1857); Lincoln-Douglas debates (1858)
- Lives of Free Blacks
Daily life; laws that limited their freedom and economic opportunities

The Civil War

- State and Federal Authority
Conflicting interpretations of state and federal authority; speeches and writings of statesmen such as Daniel Webster and John C. Calhoun
- North and South
Boundaries constituting the North and the South; geographical differences between the two regions; differences between agrarians and industrialists
- Doctrine of Nullification and Secession
Constitutional issues posed by the doctrine of nullification and secession; the earliest origins of that doctrine
- Abraham Lincoln
Abraham Lincoln's presidency; his significant writings and speeches and their relationship to the Declaration of Independence, such as his "House Divided" speech (1858), Gettysburg Address (1863), Emancipation Proclamation (1863), and inaugural addresses (1861 and 1865)
- Leaders and Soldiers
Views and lives of leaders - Ulysses S. Grant, Jefferson Davis, Robert E. Lee; views and lives of soldiers on both sides of the war, including those of black soldiers and regiments
- Fighting the War
Critical developments and events in the war; major battles; geographical advantages and obstacles; technological advances; General Lee's surrender at Appomattox
- Effect of the Civil War
How the war affected combatants, civilians, the physical environment, and future warfare

Reconstruction

- Aims and Effects of Reconstruction

Original aims of Reconstruction; its effects on the political and social structures of different regions

- Movement of Former Slaves
The push-pull factors in the movement of former slaves to the cities in the North and to the West; their differing experiences in those regions; the experiences of Buffalo Soldiers
- Restrictions on Freed Slaves
Effects of the Freedmen's Bureau; restrictions placed on the rights and opportunities of freedmen; racial segregation and "Jim Crow" laws
- Ku Klux Klan
Rise of the Ku Klux Klan; the Klan's effects
- Constitutional Amendments
Thirteenth, Fourteenth, and Fifteenth Amendments to the Constitution; their connection to Reconstruction

The Industrial Revolution in America

- Agricultural and Industrial Development
Patterns of agricultural and industrial development as they relate to climate, use of natural resources, markets, and trade; locations of such developments
- Indian Policy
Reasons for the development of federal Indian policy; reasons for the wars with American Indians; their relationship to agricultural development and industrialization
- Government Economic Policies
How states and the federal government encouraged business expansion through tariffs, banking, land grants, and subsidies
- Important People
Entrepreneurs, industrialists, and bankers in politics, commerce, and industry; Andrew Carnegie, John D. Rockefeller, Leland Stanford
- Urbanization and Industrialization
Location and effects of urbanization, renewed immigration, and industrialization; effects on social fabric of cities; wealth and economic opportunity; the conservation movement
- The Labor Movement
Child labor, working conditions, and laissez-faire policies toward big business; the labor movement; its leaders - Samuel Gompers; demand for collective bargaining; strikes and protests over labor conditions
- Immigration
New sources of large-scale immigration; contributions of immigrants to the building of cities and the economy; ways in which new social and economic patterns encouraged assimilation of newcomers into the mainstream amidst growing cultural diversity; new wave of nativism
- Grangerism and Populism
Characteristics and impact of Grangerism and Populism
- Inventors and Inventions
Significant inventors and their inventions; how they improved the quality of life; Thomas Edison, Alexander Graham Bell, Orville and Wilbur Wright

Grade Eight Health

Health Related Careers

- Careers Involved in Health Promotion
- Careers in Health Care
- Careers in Injury Prevention

Body Systems Interact With Each Other

- Blood Transporting Nutrients
- Digestive System
- Oxygen Moves from the Respiratory System
- Circulatory System

Relationship Among Factors Affecting Adolescence

- Physical (*effects of nutrition on growth*)
- Mental (*effects of stress on physical and mental performance*)
- Social

Positive Communication Builds / Maintains Relationships

- At School
- At Home
- In the Workplace
- Talking Skills
- Listening Skills

Decisions About Individual Health Concerns

- Decisions about Marijuana & THC
- Decisions about Motor Safety
- Decisions about Tobacco

Date Rape

- Date Rape Drugs
- High Risk Situations
- Prevention

- After an Assault

Anger

- Warning Signs
- Anger Management
- When to Get Professional Help

Depression

- Basics
- Causes
- Depression-Related Mood Disorders

Addiction

- Addictive Behavior
- Alcohol Addiction
- Tobacco Addiction
- Drug Addiction

Gang Resistance

- Fact/Fiction about Gangs and Violence
- Roles and Responsibilities
- Decision-Making Practices
- Verbal & Nonverbal Communication

Consequences of Sexual Activity

- Negative Feelings about Self
- Feelings Others May Hold
- Pregnancy
- Sexually Transmitted Diseases
- Long-Term Loving Relationship
- Positive Consequences

Impact of Teenage Parenting

- Social Impact

- Economic Impact
- Emotional Impact

Grade Eight Character Development

Character Awareness

- Denial

Denial is often associated with the fear of opinions of others.

Outcomes commonly associated with denial:

- Anxiety – uncomfortable thoughts and/or confusion about social situations; fear of disenfranchisement
 - Changes in social interactions – a lack of respect toward others (primarily due to an inner belief that others do not have respect for you)
 - Addiction – people experiencing denial often seek a suitable addiction to ease any remaining tensions that the unconscious activities cannot
 - Split personality – by denying tensions in oneself, they are hidden away and will eventually materialize in unusual, often unconscious, activities or expressions
- Split Personality – the goal of therapy is to integrate the various personalities present in oneself. The personalities need to meet each other, get along with each other and not fear each other.

Example: The Three Faces of Eve – a 1957 book and movie that prompted widespread examination of multiple personalities.

The story was based on a case involving a woman who felt as if she were three different little girls: good, bad and indifferent. When she was under stress, she began having psychiatric episodes – instances she could rarely recall after-the-fact – and sought professional therapy when she learned that she had threatened her daughter in one of these outbursts. The doctors referred to her personalities as Eve White, a wife and mother; Eve Black, a party girl; and Jane, a mature intellectual. After a year of therapy, doctors declared that her three personalities had integrated, and considered her cured.

Levels of Awareness

- Pride

Pride marks the first level of awareness characterized by positive feelings; however, the feelings in this stage are false as they are dependent on external circumstances (money, prestige, etc) that can be fleeting. This level is also associated with rigid personal and/or religious beliefs and people at this stage often feel defensive if they believe their values are under attack.

* Recognize that “pride” is not always a negative emotion. Example: Pride can be appropriately demonstrated when an individual shows pride and honor in their work and accomplishments.

- Courage

Courage is the first level of awareness to indicate strength of character and personal growth. In this level, individuals begin to view life as challenging and exciting rather than overwhelming. The future is viewed as a potential for improvement rather than a continuation of the past and present.

Character in Action

- **Pride:** At this level, individuals experience a positive energy – but it can lead to irrational denial and defensiveness about personal beliefs and actions. Effects can include feelings of nationalism, racism and religious fundamentalism.
- **Courage:** At this level, individuals begin to experience feelings of personal power and are inspired by feelings of accomplishment, determination and exploration. Effects can include an ability to pursue life opportunities and a growing energy to contribute to society. People at this level often become involved in skill-building activities, education and/or career advancement.
- Extend discussion on pride and courage, identifying examples that demonstrate the differences between these two levels.

Grade Eight Critical Thinking

Questions and Answers

- Critical thinking is driven by questions and answers. It is important to determine distinct differences in sentences to reach higher understanding and convey significance in reading, speaking, listening and writing.
The forms of sentences necessary for critical thinking:
 - Declarative sentences – intended to convey information (“It is snowing outside.”)
*Declarative sentences (answers) are statements that can be deemed either true or false.
 - Interrogative sentences – intended to ask a question (Is it snowing outside?)
*Interrogative sentences (questions) begin the thinking process – every declarative sentence is the answer to a question.

The forms of sentences unnecessary for critical thinking:

- Imperative sentences – intended to give commands (“Go outside.”)
 - Exclamatory sentences – intended to express feeling (“Ouch!”)
*Imperative and exclamatory sentences are simple statements that require no interpretation.
- Questions and answers form the basis for critical thinking in the following ways:
 - Questions express problems and identify tasks
 - Answers demonstrate an end to thought unless they generate additional questions

*The goal of questions is to produce answers that provoke thought and more questions.

- Questions should be formed in a way that develops further thinking and understanding. Effective questions should be formulated so that they address the following:
 - The reason for the question
 - The meaning of the question
 - The relevance of the question

Argument and Reasoning

- What is an argument?

An argument is a set of one or more declarative sentences that claim something to be true.

- Effective arguments follow a formal pattern of reasoning. Types of reasoning include:

- Inductive reasoning – a conclusion is drawn about something that is not already known based on knowledge about something that is already known. (Inductive arguments are typically based on experience or observation.)

"If I do well on my test, I might get an A in English. I think I did pretty well on the test, so there is a possibility I will get an A."

- Deductive reasoning – a conclusion drawn from what is known. (Deductive arguments are typically based on laws or rules.)

"Trees and flowers are different from one another. The rose is a flower; therefore, it is not a tree."

- Steps to identifying an effective argument:

1. Identify the beliefs and conclusion; note any unstated beliefs that seem apparent
2. Ensure you know what all statements mean; look for any vagueness or unfair bias
3. Consider credibility of sources; learn where the facts originated
4. Evaluate logic; ensure the beliefs presented support the conclusion
5. Check facts; look for false beliefs or missing information
6. Determine, based on the previous steps, if argument is reasonably acceptable

Grade Eight Interpersonal Relationships

Abusive and Damaging Relationships

- Relationships are unhealthy if they involve abuse of any kind. Abuse can be physical, sexual, emotional or verbal – or a combination of any of these.

Signs of abuse include:

- Physical – hitting, shaking, burning, biting, choking, throwing (or any action that causes physical harm or pain)
 - Sexual – any type of sexual contact between an adult and an individual younger than 18 years old; sexual abuse by another family member is called “incest”
 - Emotional – constant criticism, threats or dismissal of feelings
 - Neglect – physical neglect occurs when a child does not receive adequate food, housing, clothes, medical care or supervision; emotional neglect occurs when a parent does not provide emotional support or adequate attention to a child
- Effects of abusive relationships include:
 - Low self-esteem
 - Stress, anxiety and depression
 - Troubles sleeping, eating and concentrating
 - Poor academic performance
 - Distrust of others
 - Self-destructive behavior (drug abuse, suicide)
 - Confusion and embarrassment
 - Fear and detachment
 - How to deal with abuse:
 - Seek help so abuse does not continue
 - Talk to someone you can trust (teacher, doctor, counselor, family member)
 - Review local telephone directories for child abuse and family violence hotline numbers
 - Contact Childhelp USA at (800) 4-A-CHILD (800-422-4453)

Anger Management

- What is anger?

Anger is a feeling related to one's perception of having been offended or wronged; anger often involves a tendency to want to undo that wrongdoing by retaliation.

- When anger becomes a problem

Anger can be a healthy and normal emotion when it is expressed appropriately; signs that you are not expressing your anger appropriately include the following:

- Feeling like you have to hold in your anger
- Having frequent arguments with your partner, children or co-workers that escalate frustrations
- Experiencing trouble with the law
- Incidents of physical violence, such as hitting others or starting fights
- Threats of violence against people or property
- Out-of-control behavior, such as breaking things or performing reckless stunts

- What is anger management?

Anger management is a system of psychological techniques and methods that can be used by individuals with excessive anger to control or reduce the triggers, degrees and effects of an angered emotional state.

The goal of anger management counseling is to teach individuals how to do the following:

- Identify situations that are likely to make you mad before you get mad
- Use special skills to deal with situations that may trigger anger
- Identify instances when you are not thinking logically and attempt to correct your thinking
- Calm yourself down before you begin to get angry
- Express your feelings and needs directly
- Focus on problem-solving skills – use your energy to solve the problems; do not waste energy being angry at the problems

- Anger Management Resources

Look to the following resources for help in dealing with anger issues:

- Primary care doctor
- Family and friends
- Employee assistance programs
- Church programs
- Local and state agencies
- District court resources
- Library and Internet resources (support groups, blogs, books)

Artistic Literacy

- What is art?

Art is the process or product of purposely arranging elements in order to influence senses or emotions. Artistic activities include photography, film, sculpture, painting and many other creative processes.

- Famous artists:

- Leonardo da Vinci – an artist of the Renaissance period, most famous for his creation the *Mona Lisa*
- Michelangelo – a sculptor, painter and designer of the Renaissance period; created the famous statue of *David*
- Degas – a well-known Impressionist painter (who did not consider himself to be an Impressionist); became recognized for his paintings of people, especially dancers
- Rembrandt van Rijn – a Dutch artist of the seventeenth century known for his use of light and shadow in painting; his masterpieces include *The Man with the Golden Helmet* and *The Night Watch*
- Andy Warhol – an American artist who created paintings based on U.S. mass media (an artistic movement called “pop art”); he was one of the first artists to distribute his works in print and was known for his entrepreneurial promotion of his art
- Jackson Pollock – an abstract artist who created “action painting” – a rapid motion where paint is dripped or thrown onto canvases to product a swirling pattern of color; one of his most famous masterpieces is *One*
- Auguste Rodin – a French sculptor famous for his bronze and marble sculptures; one of his most notable works is *The Thinker*
- Vincent van Gogh – a painter of the 1800s who was recognized for his linear brush strokes and heavy paint application; the majority of van Gogh’s work was created in his final two years of life, while he was becoming insane
- Pablo Picasso – an artist associated with the evolution of modern art; one of the first painters to experience fame for their work while still alive
- Alfred Eisenstaedt – a photographer famous for his photos for *Life* magazine in the 1930s and 1940s
- Margaret Bourke-White – another photographer for *Life* magazine; recognized for her photos of concentration camps and the only American photographer to capture the Nazi bombing of Moscow
- Ansel Adams – a landscape photographer famous for his large-scale photographs of regions in the Far West

- Famous artistic works, styles and places:

- The Mona Lisa – one of the most notorious paintings worldwide; created by Leonardo da Vinci in the Renaissance period

- The Louvre – a palace that became a museum after the French Revolution; the Louvre is home to thousands of significant works of art including the *Mona Lisa* and the *Venus de Milo*
 - Sistene Chapel – the ceiling of this chapel was painted by Michelangelo in the early 1500s and portrays scenes from the *Creation* in the Old Testament
 - The Great Sphinx – a 65-foot high, lion-shaped statue featuring a human head; positioned adjacent to the Pyramids at Giza
 - Venus de Milo – a Greek statue sculpted in the first century B.C.; one of a group of statues that also included a cupid
 - Mosaics – the use of inlaid colored glass, tile or marble to decorate floors and art
 - Fresco – a painting created on wet plaster, which absorbs the color pigment; a famous fresco is the *Last Supper* by Leonardo da Vinci
- *Discussion Question: What artistic works have made a lasting impact on you? What thoughts and emotions did these works evoke?

Grade Eight Home Skills

Home & Property Management

- Clothing Care & Storage: it is important to invest your time and effort into your clothing so that you can get the best value and longest life of your wardrobe.
 - Organizing clothing:
 - Group clothes together by type and color (pants together, tops together)
 - Keep frequently worn clothes easily accessible
 - Store clothing in a dark, well-ventilated closet
 - Hang up: shirts, jackets, dresses, skirts, slacks
 - Fold and lay flat: underwear, t-shirts, sweaters, cardigans, sports knits
 - Keep shoes in original boxes if space permits; otherwise use a shoe rack
 - If closet space is an issue, carefully clean and pack away seasonal clothes
 - Ironing: always use a sturdy ironing board and take care in operating a hot iron
 - Follow instructions for each type of fabric you iron
 - Use only distilled (or boiled) water to create iron steam
 - Steamers and wrinkle-release sprays are other time-saving options to ironing; running a wet towel with a wrinkled item in the dryer can also help ease creases
- Sewing Repairs

- Identify potential sewing repairs commonly required in the home: replacing buttons, hemming drapes or pants, replacing zippers, patching up holes, mending a split seam, repairing upholstery
- Keep a basic sewing kit in your home containing the following items: needles, scissors, pin cushions, safety pins, tape measure, threads, spare buttons, elastic

Video Tutorials:

- How to perform a basic stitch:
http://www.youtube.com/watch?v=06T0C3RWfxY&feature=player_embedded
- How to sew on a button:
<http://www.wikihow.com/Sew-a-Button>

Food Management

• Grocery Shopping:

- Before you shop: check refrigerator, freezer and pantry to see what items you need, throw out spoiled food to make room for new items, check grocery ads for discounts, look at what ingredients you need for recipes you want to make, make a list of grocery items (organize your list by types of food and their location in store – i.e. dairy, produce, canned, frozen items)
- At the grocery store: keep your list handy, put heavy items (cans, potatoes) in the front of your cart and put perishables and freezer items at the back – this will ensure the freshest items are placed at the top of your bags making it easier to find and unload these items first
- Food labels: all packaged food is regulated and must list its ingredients, nutrition facts and sell-by dates
 - Ingredients: ingredients are listed in the order of what they contain most of (example: if the ingredients on a strawberry jam list sugar before strawberries, there is more sugar in the jam than strawberries). Always consider the additives and preservatives in a product and choose those with the most natural ingredients.
 - Nutrition facts: these facts indicate serving sizes and calories as well as percentages to which these foods meet your daily nutritional needs. It is important to consider sugar, fiber, fat, carbohydrates, protein and sodium content in each item.
 - Sell-by dates: these dates are when the store must remove these items from their shelves – they do not always indicate the final day the food is safe to eat. “Eat by” and “use by” dates indicate the last day you can safely consume the items. “Best before” dates are often found on non-perishable items and refer to

the date when the manufacturer can no longer guarantee the food's quality -- although the food's safety is typically not a concern.

- Organic: national standards regulate all food items that can be considered "organic." The definition of organic is: free from synthetic pesticides, fertilizers, genetic engineering, growth hormones or antibiotics. Additionally, livestock used for organic foods are also fed organic foods.

Emergencies

- Plumbing Emergencies

Understand the potential damage that water flow can have to your property; use preventive measures to avoid plumbing problems and act quickly in responding to them.

- Prevention points for plumbing:
 - Insulate and/or cover pipes, especially those exposed to cold conditions
 - Turn off and/or drain water system before leaving for vacations
 - Check the seal around tubs and showers and repair if necessary
 - Do not block overflow holes in bathtubs or sinks
 - Do not throw bulky items (diapers, sanitary napkins, paper towels) in the toilet – this will create blockages
- In case of plumbing emergencies (burst or frozen pipes, ceiling full of water, overflowing tubs, blocked toilet):
 - Turn off water source and any electrical sources that are safely accessible
 - Place buckets under affected areas, check surrounding areas for moisture
 - Only use appropriate tools (toilet plungers, putty, etc) to resolve minor problems
 - Call a plumber for major problems

Grade Eight Study Skills

Learning Styles

- What is a learning style?
The way your brain prefers to take in information – by learning your individual style, you can improve your ability to understand and remember content. Evaluating your learning style may help you identify the most effective strategies for your studying.

- There are different categories of learning styles:

Examples:

- Visual/Auditory – a preference for information delivered by sight or hearing
- Big Picture/Little Parts – viewing new information as one large picture/event vs. viewing information as individual pieces/series of events/details

To take a learning style quiz, visit:

<http://www.edutopia.org/multiple-intelligences-learning-styles-quiz>

Parental Support

- Parents can play an active role in their child's development of study skills. Methods for parental involvement may include:
 - Student interview – interview your parents to determine what their best study practices were when they were in school
 - Parent education workshops – many groups are available to help parents learn how to support their child's learning
 - Homework helpers – parents can help their children with homework assignments and studying; parents often have effective organization strategies and can help their children achieve greater success in school

Study Groups

- Studying with classmates can be helpful; however, some students study better alone. Factors to consider include:

Advantages to study groups:

- Can build confidence in some students
- Can provide an opportunity to review material you have missed
- Can help build focus

Disadvantages to study groups:

- Can waste time if study group members are not adequately prepared
- Can cause insecurity or panic in some students
- Can be very distracting

*Study groups tend to function most effectively when they are small (between 3-5 members)

Ninth Grade

Free World U

Grade Nine Language Arts

Vocabulary

- Literal and Figurative Meaning
Understanding the difference between literal and figurative meanings of words, word derivation
- Denotation and Connotation
Distinguish between the denotative and connotative meanings of words and interpret the connotative power of words
- Foreign Words in English
Word derivations from foreign root words

Reading Comprehension

- Functional Document
Features of functional documents, such as graphics and headers, and how they are used by the author to achieve their purposes
- Following Directions
Demonstrate use of sophisticated learning tools by following technical directions
- Bibliography
Prepare a bibliography of reference materials for a report using a variety of consumer, workplace, and public documents
- Compare and Contrast Across Texts
Synthesize content from several sources or works by a single author dealing with a single issue; paraphrase the ideas and connect them to other sources and related topics to demonstrate comprehension
- Examine Functional Documents
Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings; evaluate the credibility of an author's argument or defense of a claim by critiquing the relationship between generalizations and evidence, the comprehensiveness of evidence, and the way in which the author's intent affects the structure and tone of the text (e.g., in professional journals, editorials, political speeches, primary source material)
- Learning More
Generate relevant questions about readings on issues that can be researched, connecting research to original text; extend ideas presented in primary or secondary sources and connect them to other sources and related topic to demonstrate comprehension

Literature – Structural Features

- Mythology
Identify Greek, Roman, and Norse mythology and understand the origin and meaning of new words
- Genres in Dramatic Literature
Articulate the relationship between the expressed purposes and the characteristics of different forms of dramatic literature (e.g., comedy, tragedy, drama, dramatic monologue)

- Themes in Dramatic Literature
Compare and contrast the presentation of a similar theme or topic across genres to explain how the selection of genre shapes the theme or topic; compare works that express a universal theme and provide evidence to support the ideas expressed in each work
- Functional Features in Literature
Identify and describe the function of dialogue, scene designs, soliloquies, asides, and character foils in dramatic literature
- Character and Plot
Analyze interactions between main and subordinate characters in a literary text (e.g., internal and external conflicts, motivations, relationships, influences) and explain the way those interactions affect the plot
- Time and Sequence
Analyze and trace an author's development of time and sequence, including the use of complex literary devices--e.g., foreshadowing, flashbacks
- Character and Dialogue
Determine characters' traits by what the characters say about themselves in narration, dialogue, dramatic monologue, and soliloquy.
- Character and Narration
Explain how voice, persona, and the choice of a narrator affect characterization and the tone, plot, and credibility of a text
- Literary Devices
Recognize and understand the significance of various literary devices, including figurative language, imagery, allegory, and symbolism, and explain their appeal
- Interpret the Text
Interpret and evaluate the impact of ambiguities, subtleties, contradictions, ironies, and incongruities in a text
- Reading Literary Criticism
Introduction of literary criticism, vocabulary and examples
- Aesthetic Approach to Criticism
Evaluate the aesthetic qualities of style, including the impact of diction and figurative language on tone, mood, and theme, using the terminology of literary criticism
- Historical Approach to Criticism
Analyze the way in which a work of literature is related to the themes and issues of its historical period

Writing Research Papers

- Thesis Statement
Establish a controlling impression or coherent thesis that conveys a clear and distinctive perspective on the subject and maintain a consistent tone and focus throughout the piece of writing
- Active and Passive Voice
Use precise language, action verbs, sensory details, appropriate modifiers, and the active rather than the passive voice

- **Research Methods**
Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources
- **Developing Main Ideas Through Supporting Details**
Develop the main ideas within the body of the composition through supporting evidence--e.g., scenarios, commonly held beliefs, hypotheses, definitions
- **Synthesizing Information**
Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium--e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents
- **Using Quotations**
Integrate quotations and citations into a written text while maintaining the flow of ideas
- **Documentation**
Use appropriate conventions for documentation in the text, notes, and bibliographies by adhering to those in style manuals--e.g., Modern Language Association Handbook, The Chicago Manual of Style
- **Using Charts, Diagrams, and Visual Aids**
Deciding when to use a visual aid, how to organize data in a way meaningful to the information in the paper
- **Recognizing and Avoiding Bias**
How to identify bias in sources, recognizing bias in ones own writing, anticipating bias in the reader
- **Revising Your Paper**
Revise writing to improve the logic and coherence of the organization and controlling perspective, the precision of word choice, and the tone by taking into consideration the audience, purpose, and formality of the context
- **Publishing Your Paper**
Design and publish documents by using advanced publishing software and graphic programs

Writing a Short Story

- **Narration**
Determining point of view of narrator, determining what information the narrator can relate, using narration to set a scene and determine tone
- **Writing Effective Descriptions**
Describe with concrete sensory details the sights, sounds, and smells of a scene and the specific actions, movements, gestures, and feelings of the characters; use interior monologue to depict the characters' feelings; make effective use of descriptions of appearance, images, shifting perspectives, and sensory details
- **Sequence**
Relate a sequence of events and communicate the significance of the events to the audience; locate scenes and incidents in specific places
- **Editing**
How to edit a short story; pace the presentation of actions to accommodate changes in time and mood

Writing Essays

- Responses to Literature
Demonstrate a comprehensive grasp of the significant ideas of literary works; support important ideas and viewpoints through accurate and detailed references to the text or to other works; demonstrate awareness of the author's use of stylistic devices and an appreciation of the effects created; identify and assess the impact of perceived ambiguities, nuances, and complexities within the text
- Expository Essays
Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives; convey information and ideas from primary and secondary sources accurately and coherently; make distinctions between the relative value and significance of specific data, facts, and ideas; include visual aids by employing appropriate technology to organize and record information on charts, maps, and graphs; anticipate and address readers' potential misunderstandings, biases, and expectations; use technical terms and notations accurately
- Persuasive Essays
Structure ideas and arguments in a sustained and logical fashion; use specific rhetorical devices to support assertions--e.g., appeal to logic through reasoning; appeal to emotion or ethical belief; relate a personal anecdote, case study, or analogy; clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, and expressions of commonly accepted beliefs and logical reasoning; address readers' concerns, counterclaims, biases, and expectations
- Writing Technical Documents
e.g., a manual on rules of behavior for conflict resolution, procedures for conducting a meeting, minutes of a meeting; report information and convey ideas logically and correctly; offer detailed and accurate specifications; include scenarios, definitions, and examples to aid comprehension--e.g., troubleshooting guide; anticipate readers' problems, mistakes, and misunderstandings
- Writing Business Letters
Provide clear and purposeful information and address the intended audience appropriately; use appropriate vocabulary, tone, and style to take into account the nature of the relationship with, and the knowledge and interests of, the recipients; highlight central ideas or images; follow a conventional style with page formats, fonts, and spacing that contribute to the documents' readability and impact

Grammar and Mechanics

- Clauses
Identify and correctly use clauses--e.g., main and subordinate; phrases--e.g., gerund, infinitive, and participial; and mechanics of punctuation--e.g., semicolons, colons, ellipses, hyphens
- Sentence Construction and Editing
Understand sentence construction--e.g., parallel structure, subordination, proper placement of modifiers; and proper English usage--e.g., consistency of verb tenses
- Usage in Paragraphs
Demonstrate an understanding of proper English usage and control of grammar, paragraph and sentence structure, diction, and syntax

- **Correct Manuscript Form**
Produce legible work that shows accurate spelling and correct use of the conventions of punctuation and capitalization; reflect appropriate manuscript requirements, including title page presentation, pagination, spacing and margins, and integration of source and support material--e.g., in-text citation, use of direct quotations, paraphrasing) with appropriate citations

Listening to an Oral Presentation

- **Listening Comprehension**
Formulate judgments about the ideas under discussion and support those judgments with convincing evidence. 1.2 Compare and contrast the ways in which media genres (e.g., televised news, news magazines, documentaries, online information) cover the same event
- **Listening to Speeches**
Analyze historically significant speeches (e.g., Abraham Lincoln's "Gettysburg Address," Martin Luther King, Jr.'s "I Have a Dream") to find the rhetorical devices and features that make them memorable; assess how language and delivery affect the mood and tone of the oral communication and make an impact on the audience; evaluate the clarity, quality, effectiveness, and general coherence of a speaker's important points, arguments, evidence, organization of ideas, delivery, diction, and syntax
- **Analyzing Media Presentations**
Analyze the types of arguments used by the speaker, including argument by causation, analogy, authority, emotion, and logic; identify the aesthetic effects of a media presentation and evaluate the techniques used to create them--e.g., compare Shakespeare's Henry V with Kenneth Branagh's 1990 film version

Public Speaking

- **Types of Presentations**
Choose logical patterns of organization (e.g., chronological, topical, cause and effect) to inform and to persuade, by soliciting agreement or action, or to unite audiences behind a common belief or cause
- **Preparing a Presentation**
Choose appropriate techniques for developing the introduction and conclusion--e.g., by using literary quotations, anecdotes, references to authoritative sources; recognize and use elements of classical speech forms--e.g., introduction, first and second transitions, body, conclusion--in formulating rational arguments and applying the art of persuasion and debate; present and advance a clear thesis statement and choose appropriate types of proof--e.g., statistics, testimony, specific instances--that meet standard tests for evidence, including credibility, validity, and relevance
- **Interview Techniques**
Prepare and ask relevant questions; make notes of responses; use language that conveys maturity, sensitivity, and respect; respond correctly and effectively to questions; demonstrate knowledge of the subject or organization; compile and report responses; evaluate the effectiveness of the interview
- **Preparing Notes and Visual Aids**
Use props, visual aids, graphs, and electronic media to enhance the appeal and accuracy of presentations; produce concise notes for extemporaneous delivery
- **While You Speak**
Analyze the occasion and the interests of the audience and choose effective verbal and nonverbal techniques--e.g., voice, gestures, eye contact--for presentations

- **Problems in Public Speaking**
Identifying and correcting common problems in public speaking strategies
- **Narrative Presentations**
Narrate a sequence of events and communicate their significance to the audience; locate scenes and incidents in specific places; describe with concrete sensory details the sights, sounds, and smells of a scene and the specific actions, movements, gestures, and feelings of characters; pace the presentation of actions to accommodate time or mood changes
- **Expository Presentations**
Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives; convey information and ideas from primary and secondary sources accurately and coherently; make distinctions between the relative value and significance of specific data, facts, and ideas; include visual aids by employing appropriate technology to organize and display information on charts, maps, and graphs; anticipate and address the listener's potential misunderstandings, biases, and expectations; use technical terms and notations accurately
- **Persuasive Arguments Presentations**
Structure ideas and arguments in a coherent, logical fashion; use rhetorical devices to support assertions--e.g., by appeal to logic through reasoning; by appeal to emotion or ethical belief; by use of personal anecdote, case study, or analogy; clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, expressions of commonly accepted beliefs, and logical reasoning; anticipate and address the listener's concerns and counterarguments
- **Descriptive Presentations**
Establish clearly the speaker's point of view on the subject of the presentation; establish clearly the speaker's relationship with that subject--e.g., dispassionate observation, personal involvement; use effective, factual descriptions of appearance, concrete images, shifting perspectives and vantage points, and sensory details
- **Oral Response to Literature**
Advance a judgment demonstrating a comprehensive grasp of the significant ideas of works or passages--i.e., make and support warranted assertions about the text; support important ideas and viewpoints through accurate and detailed references to the text or to other works; demonstrate awareness of the author's use of stylistic devices and an appreciation of the effects created; identify and assess the impact of perceived ambiguities, nuances, and complexities within the text

Geometry

Geometry Basics

- **Using Geometric Tools**
Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line
- **Writing Geometric Proofs**
Students write geometric proofs, including proofs by contradiction
- **Logical Arguments**
Students construct and judge the validity of a logical argument and give counterexamples to disprove a statement

- The Affects of Changes in Dimensions
Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids
- Classifying and Problem Solving
Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems
- Geometric Figures
Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures
- Demonstrating Understanding
Students demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning
- Theorems Involving Properties
Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles
- Coordinate Geometry
Students prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles
- Rigid Motions
Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections

Polygons, Circles and 3-Dimensional Figures:

- Areas of Polygons
Students compute areas of polygons, including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids
- Relationships Between Angles
Students prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles
- Circle Relationships
Students prove and solve problems regarding relationships among chords, secants, tangents, inscribed angles, and inscribed and circumscribed polygons of circles
- 3-Dimensional Figures
Students compute the volumes and surface areas of prisms, pyramids, cylinders, cones, and spheres; and students commit to memory the formulas for prisms, pyramids, and cylinders

Triangles:

- Basic Trigonometric Functions
Students know the definitions of the basic trigonometric functions defined by the angles of a right triangle. They also know and are able to use elementary relationships between them
- Theorems of Congruence and Similarity
Students prove basic theorems involving congruence and similarity

- Congruent and Similar Triangles
Students prove that triangles are congruent or similar, and they are able to use the concept of corresponding parts of congruent triangles
- Angle and Side Relationships
Students know and are able to use angle and side relationships in problems with special right triangles, such as 30° , 60° , and 90° triangles and 45° , 45° , and 90° triangles
- Triangle Inequality Theorem
Students know and are able to use the triangle inequality theorem
- Pythagorean Theorem
Students prove the Pythagorean theorem; students use the Pythagorean theorem to determine distance and find missing lengths of sides of right triangles
- Trigonometric Functions and Right Triangles
Students use trigonometric functions to solve for an unknown length of a side of a right triangle, given an angle and a length of a side

Biology / Life Science

Cell Biology

- Cell Membranes
Cells are enclosed within semi permeable membranes that regulate their interaction with their surroundings
- Enzymes
Enzymes are proteins that catalyze biochemical reactions without altering the reaction equilibrium; the activities of enzymes depend on temperature, ionic conditions, and the pH of the surroundings
- Differences in Cell Types
How prokaryotic cells, eukaryotic cells (including those from plants and animals), and viruses differ in complexity and general structure
- RNA Messengers
The central dogma of molecular biology outlines the flow of information from transcription of ribonucleic acid (RNA) in the nucleus to translation of proteins on ribosomes in the cytoplasm
- Proteins
The role of the endoplasmic reticulum and Golgi apparatus in the secretion of proteins
- Plant Cell Energy
Usable energy is captured from sunlight by chloroplasts and is stored through the synthesis of sugar from carbon dioxide
- Animal Cell Energy
The role of the mitochondria in making stored chemical-bond energy available to cells by completing the breakdown of glucose to carbon dioxide
- Macromolecules
Most macromolecules (polysaccharides, nucleic acids, proteins, lipids) in cells and organisms are synthesized from a small collection of simple precursors

Genetics

- Meiosis
Meiosis produces gametes containing one chromosome of each type; only certain cells undergo meiosis; why approximately half of an individual's DNA sequence comes from each parent
- Combining Chromosomes
The role of chromosomes in determining an individual's sex; how random chromosome segregation explains the probability that a particular allele will be in a gamete
- Combining Alleles
New combinations of alleles may be generated in a zygote; how to predict possible combinations of alleles in a zygote from the genetic makeup of the parents
- Probable Outcome of Phenotypes
How to predict the probable outcome of phenotypes in a genetic cross from the genotypes of the parents and mode of inheritance (autosomal or X-linked, dominant or recessive)
- Mendel's Laws
The genetic basis for Mendel's laws of segregation and independent assortment

Ecology

- Bio Diversity
Bio diversity is the sum total of different kinds of organisms and is affected by alterations of habitats
- Effects of Change
How to analyze changes in an ecosystem resulting from changes in climate, human activity, introduction of nonnative species, or changes in population size
- Population
How fluctuations in population size in an ecosystem are determined by the relative rates of birth, immigration, emigration, and death
- Ecosystem Cycles
How water, carbon, and nitrogen cycle between abiotic resources and organic matter in the ecosystem and how oxygen cycles through photosynthesis and respiration
- Ecosystem Stability
A vital part of an ecosystem is the stability of its producers and decomposers
- Energy Dissipation
At each link in a food web some energy is stored in newly made structures but much energy is dissipated into the environment as heat; dissipation may be represented in an energy pyramid

Evolution

- Phenotype and Genotype
Why natural selection acts on the phenotype rather than the genotype of an organism
- Lethal Alleles
Why alleles that are lethal in a homozygous individual may be carried in a heterozygote and thus maintained in a gene pool

- Mutations
New mutations are constantly being generated in a gene pool; variation within a species increases the likelihood that some members of a species will survive under changed environmental conditions
- Natural Selection and Diversity
How natural selection determines the differential survival of groups of organisms; a great diversity of species increases the chance that some organisms survive major changes in the environment
- Genetic Drift
The effects of genetic drift on the diversity of organisms in a population
- The Effects of Isolation
Reproductive or geographic isolation affects speciation
- Fossil Evidence
How to analyze fossil evidence with regard to biological diversity, episodic speciation, and mass extinction

Physiology

- Body System Coordination
How the complementary activity of major body systems provides cells with oxygen and nutrients and removes toxic waste products such as carbon dioxide
- Nervous System Communication
How the nervous system mediates communication between different parts of the body and the body's interactions with the environment
- Feedback Loops
How feedback loops in the nervous and endocrine systems regulate conditions in the body
- Functions of the Nervous System
The functions of the nervous system and the role of neurons in transmitting electrochemical impulses
- Neuron Roles
The roles of sensory neurons, interneurons, and motor neurons in sensation, thought, and response

Grade Nine Social Studies

Geography of the World

- Studying the Earth
- Human Society
- Water, Climate, and Life

The United States and Canada

- The United States

- Canada

Latin America

- Mexico
- Central America and the West Indies
- Brazil and its Neighbors
- The Andean Countries

Western Europe

- The British Isles
- France and Germany
- Switzerland, Austria and the Benelux
- The Iberian Peninsula
- Italy and Greece
- The Scandinavian Peninsula
- Denmark and Iceland

Eastern Europe

- The Baltic States
- The Balkan Countries
- Central Eastern Europe
- Russia

North Africa

- Egypt
- The Maghreb

Africa South of the Sahara

- Nigeria and the Sahel
- The West African Coast
- The Congo
- Central Africa
- East Africa

- The Horn of Africa
- South Africa and the Southern Atlantic Coast
- The Indian Ocean and Central Southern Africa

West and Central Asia

- The Asian Mediterranean
- The Arabian Peninsula
- Iraq, Iran, and Afghanistan
- The Caucasus
- Central Asia and Mongolia

South and East Asia

- India
- South Asia
- China
- Japan
- The Koreas
- Mainland Southeast Asia
- Island Southeast Asia
- Indonesia

Australia, Oceania and Antarctica

- Australia
- New Zealand
- Oceania
- Antarctica

Grade Nine Health

Illnesses

- Communicable
- Chronic
- Degenerative

Outcomes of Health Promotion and Illness Prevention

- Stress
- Fitness
- Likelihood of Injury
- Likelihood of Illness

Social and Economic Effects of Health Problems

- Effects on Individuals
- Effects on Families
- Effects on Society

Environmental Conditions Affect Health

- Acid Rain
- Oil Spills
- Solid Waste Contamination
- Nuclear Leaks
- Ozone Depletion

Changes in Health & Body Functions at Various Stages of Life

- Changes in Physical Health
- Changes in Diet/Nutrition
- Emotional/Intellectual Changes

Individual Health Goals

- Planning to Achieve Goals
- Decision Making Affects Goals
- Health Literacy

Sex Addiction

- Behavior
- Interference with "Normal" Living
- Consequences
- Treatment

Gang Resistance

- Identification of Emotions
- Empathy for Others
- Body Language/Tone of Voice
- Refusal Skills
- Recognizing Anger in Others
- Calming Others
- Consequences for Fighting
- Conflict Resolution

Beliefs Can Affect Relationships and Marriage

- Possible Effects of Cultural Factors
- Possible Affects of Religious Beliefs
- Other Factors That May Affect Relationships
- Problems Created by Contrasting Values/Beliefs
- Ways to Manage Problems Created by Contrasting Values

Home Economics

Basic Cooking Terms

- Terms for Preparing Ingredients
- Terms for Combining Ingredients
- Terms for Cooking
- Other Terms

Equipment

- Cooking and Baking
- Food Preparation
- Other

Eggs

- Buying
- Storing

- Cooking

Meat and Pork

- Buying
- Storing
- Cooking

Poultry

- Cleaning Poultry
- Storing Poultry
- Cooking Chicken
- Cooking Turkey

Seafood

- Buying
- Storing
- Cooking

Side Items

- Vegetables
- Starches
- Salads
- Fruits

Food Miscellaneous

- Menus
- Table Settings
- Outdoor Cooking
- Preparing a Menu
- Preparing Food Ahead of Time
- Grocery Ads
- Drugstore Ads
- Restaurant Menus

Household Chores

- Doing the Laundry
- Caring for Indoor Plants
- Doing the Dishes
- Cleaning the Floors
- Dusting
- Cleaning Bathrooms
- Spring Cleaning
- Making Your Own Cleaning Products

Household Finances

- Checking Account
- Savings Account
- Household Budget
- Bank Loans
- Credit Cards
- Car Financing
- Traveler's Checks

Insurance

- Car Insurance
- Health Insurance
- Life Insurance

Getting a Job

- The Employee
- The Employer
- The Interview
- The Application
- Employment Ads

Society and Culture

- What is sociology?
 - Sociology is the study of human society and social interactions; sociologists study these factors to examine human behavior and to determine how these behaviors are shaped.

What is a society?

- A society is a large social group that shares the same geographical area and encounters the same political authority and cultural expectations.

Why is sociology important?

- Sociology enables us to develop a deeper understanding of ourselves and the world around us; it can provide perspective on our behaviors and why we behave the way we do.
- Many professional fields/career paths require the ability to analyze sociology including:
 - o Health and Human Services:
Counseling, Education, Medicine, Social Work
 - o Academics:
Anthropology, History, Psychology, Geography
 - o Law:
Criminal Justice, Political Science
 - o Business:
Advertising, Management, Marketing, Labor Relations
 - o Communications:
Broadcasting, Journalism, Public Relations

*Discussion Question: How do you think you have used sociology in your life to this point? Has it affected your perspective on areas such as school, family and the future?

- Culture

What is culture?

- Culture is the language, values, knowledge, customs and material objects that are passed on through generations within a society.

Why is culture important?

- Culture is critical to our individual survival and our communication with others; through our culture, we learn how to take care of ourselves, behave toward others, earn and use resources, etc.
- Culture is also essential for larger societies; it imposes systems of rules, laws and expectations for people to abide by.

There are two types of culture:

- Material culture – physical creations of a society (objects, possessions, etc.)
- Nonmaterial culture – ideas, values and beliefs of a society

Components of nonmaterial culture common to all societies include:

1. Symbols – signs of shared meaning that communicate ideas and concepts
2. Language – a set of symbols groups use to communicate
3. Values – ideas about what is (or is not) acceptable
4. Norms – expectations for behavior within a group

What is cultural diversity?

- Cultural diversity is achieved when there is a mix of race, ethnicity, age, religion, occupation, etc. within a group
- Cultural diversity enables discovery and invention of new ideas and brings about cultural change
- Ethnocentrism (an assumption that one's own culture is superior to others) can hinder cultural change

*Discussion Question: What are some different cultures you have encountered? What was this experience like? What did you learn?

- Socialization

What is socialization?

- Socialization is the ongoing process by which people attain their self-identity and learn the skills needed to survive within a society.

Why is socialization important?

- Socialization impacts the kind of person we become by affecting what we learn from our surrounding social groups and environment.

The socialization process is enabled by several forces, most commonly including:

- Family
- School
- Peer groups
- Media
- Workplace

*Discussion Question: What factors do you believe have most strongly shaped your own socialization? Why do you think these forces have been most powerful in influencing your interactions?

Grade Nine Character Development

Character Awareness

- World View

What is a world view? Our personal perspective on life and society

How does our world view form? Our primary world view is shaped by significant adults in our lives, geographic location, customs and culture

How does our world view evolve? Our early world view changes as we encounter different people, experience new customs and explore new locations

Effects of expanding our world view:

- Identify ourselves as part of the human race
- Develop interests outside basic needs and survival
- Identify significance in our actions and behaviors

Extend discussion of world view, identifying how your world view has changed throughout your life. What are some of the larger responsibilities to outside forces (the environment, the community, animals, etc.) have you assumed or would you like to assume in the future?

Levels of Awareness

- Neutrality

Neutrality is a level of awareness that is characterized by flexibility, freedom and relaxation. In this level, individuals take things in stride and roll with the punches. There is no need for people in this level to prove anything. They feel safe and get along with other people.

- Willingness

Willingness is a level of awareness that is characterized by willpower and discipline. People at this level begin using their energy more effectively and focus their efforts on doing their best.

Character in Action

- Neutrality: At this level, individuals are taking care of their basic needs but do not feel it necessary to push themselves too hard or strive for more. These individuals are comfortable with themselves and enjoy working at their own pace. An example of someone at this level may be a self-employed person who wishes to set their own schedule, goals, etc.
- Willingness: At this level, individuals find importance in time management, organization and productivity. These are often the people who get things done well and are dependable. Examples of this level can be seen in good students who take their studies seriously and commit the time to do everything well.

Grade Nine Critical Thinking

Interpretation and World View

- Critical interpretation involves analysis and evaluation.

Effective interpretation skills require thinkers to have the ability to:

- Understand and express meaning or significance
- Identify relationships between statements, questions or concepts
- Evaluate the truth of statements

- What is a world view?

A world view is one's personal perspective (the way one sees the world).

World views are typically shaped by:

- Upbringing
- Culture
- Location
- Modern influences (media, technology, etc.)

A broader world view enables a higher level of critical thinking by providing thinkers with:

- A desire for the best knowledge – regardless of whether the answers support personal beliefs
- An ability to analyze information based on reason and evidence – rather than emotion or bias
- Open-mindedness and tolerance for diverse viewpoints
- A belief that multiple solutions can be acceptable

- How to achieve a broader world view:

1. Identify your personal perspective including any factors shaping your primary world view (role models, customs, modern influences)
2. Compare your personal perspective to other world views; research other ways of thinking and identify attitudes and behaviors necessary to thrive in different situations
3. Recognize your role as part of the human race and consider outside interests apart from your own basic needs and survival (example: social responsibility to forces such as the environment, animals, property, etc.)

4. Develop social links with people of different backgrounds, cultures, etc.
5. Evaluate changes to your perspective and consider long range consequences and benefits of a broader world view

Decision Making

- Decision-making skills help people develop their thinking processes and enhance problem-solving abilities.

In making important choices, people should ask themselves the following questions:

- What matters to me?
 - What are my available options?
 - How will my choice impact myself and others?
- Key components in decision making:
 - Determine the decision that needs to be made
 - Identify personal values affecting decision
 - Understand and accept uncertainty as part of the process
 - Identify potential consequences
 - Seek information and expand learning
 - Establish alternatives or tradeoffs

Grade Nine Interpersonal Relationships

Co-Worker Relationships

- It is important to have strong relationships with people you work with – these relationships can ultimately affect your job satisfaction and performance.

Methods for building positive co-worker relationships include:

- Respect people's differences – recognize that not every person shares the same thoughts and values
- Think positively – do not speak negatively about work issues or co-workers
- Acknowledge others – talk to your co-workers on a regular basis; smile and greet people when you see them

- Listen to others – give co-workers your full attention; do not interrupt
- Appreciate others – show consideration and respect for the contributions your co-workers make
- Pitch in – help out as much as possible, even if these duties are not part of your specific job responsibilities
- Do your best – be a problem-solver, seek improvement in all that you do
- Respect others' time and priorities – do not interrupt a co-worker while they are working on something; keep requests and questions brief
- Admit your mistakes and apologize – recognize when you are wrong and apologize with grace and sincerity
- Enrich all areas of your life – do not focus all of yourself on work; indulge in hobbies, relationships and yourself
- Do not settle – if your work environment is unpleasant, seek different employment options; you will be more productive when you work somewhere that makes you happy

Grade Nine Cultural Literacy – Art, Architecture & Music

Architectural Literacy

- What is architecture?

Architecture is the art and science of designing and constructing buildings and other physical structures.

- Architectural styles:
 - Greek orders of architecture – reflected in columns used to build temples
 - o Doric column – grooved column with a simple flaring capital
 - o Ionic column – fluted column including a capital with a large scroll
 - o Corinthian column – smooth column adorned with shoots and leaves
 - Gothic architecture – a style typical of the European Middle Ages characterized by lighter, higher buildings than the Greek styles; Gothic cathedrals feature pointed arches, vaults, high ceilings and decorative carvings (Notre Dame de Paris is an example of Gothic architecture)
 - Modern architecture – there are five modern styles:
 - o International: the first style based on the rational and functional; homes were built to be “a machine for living”
 - o Brutalism: shows the original, underlying framework and rough edges
 - o Expressionism: artistic, whimsical style lacking function
 - o Postmodernism: a style that incorporates historic elements (columns, ornamentation, etc.)

- Chicago School: a style driven by financial profit; formulated and systematic designs with simplicity, regularity and structural function
- Architectural landmarks:
 - The Colosseum – one of the largest single buildings worldwide; once held approximately 50,000 Greek spectators for gladiator games
 - St. Peter's – a Roman holy building constructed on the burial site of apostle Peter; the Pope offers Mass at St. Peter's when he is in Rome
 - Parthenon on the Acropolis – a building in Athens that housed several sculptures of Greek mythology; these sculptures were moved to the British Museum in England in the 1800s
 - Taj Mahal – a building in India that was designed to house the tomb of Mumtaz Mahal, the wife of Shah Jahan; its construction spanned 18 years and features an Islamic style reflected in its dome, minarets and decoration
 - Egyptian pyramids – structures built around 2500 B.C. to preserve the mummified bodies of rulers; the pyramids feature intricate decoration with steep, triangular sides
 - The Great Wall of China – a 1,500-mile long, 25-foot high wall built in the third century by Chinese dynasty to secure the country from Central Asian nomads
 - Pagodas – brick or wooden structures found in China, Korea and Japan and used for Buddhist shrines, tombs and memorials
 - Stonehenge – an ancient monument in England; its stones have unknown connections to religion, the sun and the stars; it remains a mystery how the stones were moved to this location
 - Golden Gate Bridge – a suspension bridge built in San Francisco in the 1930s; at more than 9,000 feet in length, it remains one of the longest suspension bridges worldwide
 - The Chrysler Building – a classic skyscraper designed by William Val Alen and featuring Art Deco styling (a modern style that began in the 1920s)
 - The Capitol – located on a hill in Washington, D.C. (Capitol Hill); site selected by George Washington and building designed by architect Pierre L'Enfant; much of the original architectural work was destroyed by fire in the War of 1812; the Capitol now features a dome and wings and seats the U.S. legislature
- Famous architects:
 - Frank Lloyd Wright – an American architect who developed architectural theory based on functionality; his simple, clean-looking buildings featured fully functional areas (allowing for interaction within buildings and with outdoor landscaping)
 - Ludwig Mies van der Rohe – the architect who designed the first glass buildings across New York, including the famous Seagram Building; his designs were replicated by many and admired for their precision and simplicity
 - Walter Gropius – an architect chiefly associated with designing the Bauhaus School building (the leading example of modern architecture in the 1900s)
 - Alvar Aalto – an architect from Finland (a country producing the largest number of modern architects); he created buildings that functioned responsively to their environments (by introducing and modulating natural light and temperature)

*Discussion Question: Where and when do you notice architecture? What are some of the architectural styles you notice most? What architectural movements do you think these styles were influenced by?

Grade Nine Health & Wellness

Sexual Health

- What is sexual health?

Sexual health is the state of physical, emotional, mental and social wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction or other problems.

Sexual health is achieved by:

- a positive and respectful approach to sexuality and sexual relationships
- the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence

Sexual health issues include:

- Contraception
- Abstinence
- Sexually transmitted diseases

- Contraception

What is contraception?

Contraception is the use of a device or procedure to prevent pregnancy (conception) as a result of sexual activity.

Methods of contraception include:

- Abstinence – the act of refraining from sexual activity
- Birth control pills (oral contraception) – medication females take daily to prevent pregnancy
- Condoms – a barrier device most commonly used during sexual intercourse to reduce the probability of pregnancy and spreading sexually transmitted diseases
- Diaphragm – a shallow latex cup inserted into the vagina to prevent pregnancy
- Intrauterine device (IUD) – a small, “T-shaped” device inserted into the uterus to prevent pregnancy

- Surgery (vasectomy – males; tubal ligation – females) – permanent sterilization procedures

- Abstinence

Why is abstinence important?

Abstinence is the act of refraining from sexual activity; abstinence is the only certain way to prevent unintended pregnancy and sexually transmitted diseases (STDs)

Reasons people choose abstinence:

- Pregnancy and STD prevention
- Avoid medical or hormonal side effects of other contraception
- Free of cost
- Not ready for a sexual relationship
- Have not found the right partner
- Focus on school, career or other activities
- Support personal, moral or religious beliefs
- Recover from a break up or other difficult loss

- Sexually transmitted diseases (STDs)

What is a sexually transmitted disease?

A sexually transmitted disease is an infectious disease that spreads from person to person through intimate contact. These diseases, if left untreated, can lead to infertility (the inability to have a baby) or even death. STDs can affect anyone who is having sex and are common among teens. It is critical to know how to protect yourself against STDs.

Common STDs include:

- Chlamydia
- Genital Herpes (HSV-2)
- Genital Warts
- Gonorrhea
- Hepatitis B (HBV)
- HIV and AIDS
- Pelvic Inflammatory Disease (PID)
- Pubic Lice (Crabs)
- Syphilis

- How STDs are spread:

- Unprotected sex or any skin-to-skin contact with an infected area or sore
- People do not always realize they are infected and unknowingly pass it on to others
- How STDs are prevented:
 - Abstain from all sexual contact
 - Use condoms
 - Maintain regular doctor's visits; females should see have exams with a gynecologist; males should have genital exams
 - Seek treatment as soon as an STD is suspected
- How STDs are treated:
 - Medical intervention is necessary for treatment of STDs

*Additional information is available through the National STD Hotline at 1-800-227-8922

Mental Health

- What is mental health?

Mental health is defined as the psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment; people in good mental health are able to effectively control their thoughts, feelings and behaviors.

- Benefits of good mental health include:
 - Positive self-image
 - Strong relationships with others
 - Effective problem solving abilities
 - Stress-coping abilities

Grade Nine Home Skills

Home & Property Management

- Understand the importance of home and property maintenance – always address problems as they occur to avoid bigger, more costly problems in the long run.

- Indoor Maintenance & Repairs
 - Perform the following tasks regularly to keep household repairs at a minimum:
 - Oil hinges, latches and door handles
 - Check for loose screws on furniture or other fixtures
 - Keep replacement light bulbs, fuses and flashlights in a convenient place
 - Move drawers around to ensure even wear
 - Maintain proper ventilation, particularly in rooms with moisture (kitchen, bathroom)
 - Keep instructional manuals and/or notes in one place for easy reference
 - Follow manufacturers recommendations for care and service

- Outdoor Maintenance & Repairs
 - Perform the following tasks regularly to keep property repairs at a minimum:
 - Check external walls and surfaces for cracks
 - Maintain paintwork (on frames, stucco, etc.)
 - Check drains for blockages, debris and use appropriate draining products
 - Check external doors and hinges for warping, moisture, loose screws
 - Mow lawn and keep landscaping and flowerbeds tidy
 - Assess any pest problems in the outdoor areas

- Tools
 - Keep a comprehensive toolbox accessible for simple repairs. Essential tools include: screwdrivers (standard and Phillips), hammer, pliers, retractable knife, measuring tape, adjustable wrench, screws, nails, glue, sand paper, saw, ladder and oil
 - Use protective gear (safety goggles, gloves, non-slip shoes) and ensure tools are properly stored and maintained

Food Management

- Food Storage & Safety
 - To ensure food quality and safety, keep the following items in the following places:
 - Pantry – canned foods, bottled foods, dried foods

 - Refrigerator – perishable foods (dairy, meat, salads, eggs, some vegetables)

- Never use refrigerator doors to store items that can easily spoil (milk, eggs, etc)
 - Do not overstock refrigerator – air needs to circulate freely around food
 - Use crisper drawers for lettuce and vegetables to retain crispness
 - Store raw meats on the bottom shelf to avoid spreading bacteria to other food
- For a complete chart of food storage guidelines, visit:
<http://www.storeitfoods.com/shelf-life>

Emergencies

- Electrical Emergencies:

No power or lights:

- If other homes in the neighborhood are affected, it is a local power outage:
 - Turn off appliances and light switches except one bulb to alert you when power has returned
 - Use flashlights and candles to illuminate spaces
 - Wear appropriate clothing and eat and drink frequently to fuel your body
- If only your home is affected:
 - Check the main fuse box and check the “Residual Current Device” (RCD) – if the switch has tripped to the “off” position, turn the switch back on

No lights or power in a single circuit or socket:

- Check bulbs or appliances in a different socket to rule out appliance failure or a blown bulb.
 - If problem persists, turn off power at source/fuse box
 - If power surge does not work, contact a licensed electrician for assistance

- Gas Emergencies: in homes with gas appliances, it is important to know how to address problems with gas.
 - Identify signs of a gas leak or problem:
 - A strong or slight smell of gas in a room with gas appliances
 - If you develop headaches, nausea, exhaustion or muscle weakness in a room with gas appliances
 - How to respond to gas problems:
 - If there is a strong smell of gas: turn off the gas next to the meter; call the gas company, evacuate house; open windows, turn off all gas appliances, alert neighbors, do not touch electrical switches
 - If there is a slight smell of gas: check pilot lights on stoves to ensure they have not blown out or been left on without being ignited, open doors and windows to clear out odor, relight the pilot lights

Grade Nine Personal Finances

Budgeting

- What is a budget?

A budget is a financial document used to project future income and expenses.

- Why do people budget?

To reach financial goals including the following:

- The ability to pay all your bills from your paycheck and have money left over
 - The ability to make large purchases (a house, car, etc.)
 - The ability to save for the future (college, retirement)
 - The ability to pay for activities (vacations, shopping, entertainment)
 - The ability to pay off debt and/or rebuild credit
 - The ability to change employment status
 - The ability to invest in insurance or other securities
- What are the benefits of budgeting?

- A budget allows you to decide what level of spending you are comfortable with and determine how your income supports your spending
 - A budget can keep you from living in heavy debt and eliminate guilt about excessive expenses or spending money you do not have
 - A budget can help you identify the need for additional income
- A Sample Budget:

“Bobbie” wants to determine a way to reach new financial goals including establishing a large savings account, paying for continuing education courses and eliminating her credit card debt. She wants to achieve these goals based on her current monthly income of \$4,100 (after taxes and deductions).

Her current monthly expenses are as follows:

Mortgage/Rent	\$1,492
Car payment	\$342
Utilities	\$375
Food (including dining out)	\$675
Toiletries/haircuts	\$85
Spending money	\$200
Car maintenance/insurance/expenses	\$133
Vacations (\$2,800/year)	\$233
Clothing	\$267
Gifts and contributions	\$200
Credit card debt	\$50
TOTAL	\$4,052

To meet her financial goals without increasing her income, Bobbie will have to decrease her expenses. Her viable options for reducing expenses include:

- Cutting down on utilities (eliminating her land line telephone and using only her cell phone) and programming thermostat to save on electric bill
= \$83 monthly savings
- Cutting down on grocery bills (spending a maximum of \$125 per week on groceries) and limiting dining out to once a week
= \$175 monthly savings
- Cutting down on car insurance costs (investigating lower-priced options)
= \$33 monthly savings
- Cutting down on vacation costs (spending a maximum of \$500 per year on vacations)
= \$60 monthly savings

TOTAL Monthly Savings: \$351

By following through with these adjustments, Bobbie will have approximately \$400 of her monthly paycheck to devote to reaching her financial goals.

- Reducing Expenses

There are several additional ways to cut regular expenses including:

- Shopping around – comparing prices of everyday items and buying them at the lowest cost available
- Purchasing high-quality, reliable products (avoiding trendy items)
- Be creative – take less expensive vacations, get books and other entertainment from library, borrow (instead of buy) items from friends and family

Additional Income

- When is additional income required?

When you have reduced your expenses as much as possible and still have difficulty reaching your financial goals, you may need to consider temporary or permanent methods to increase your income

- How to generate additional income

There are several options you can explore to increase your income including:

- Changing jobs (to a higher paying position)
- Getting a second job
- Freelancing for your employer's company (offering to do work/projects outside your regular working hours)
- Starting a small business

There are pros and cons to consider before taking steps to increase income:

Pros:

- Reaching your financial goals
- Building new career skills
- Personal satisfaction

Cons:

- Less available time (for yourself and for your friends and family)
- Added stress
- Higher taxes (the more you make, the more you pay in taxes)

Grade Nine Parenting Skills

Are you ready to be a parent?

- What does it mean to be a parent?
 - Know the definition of parent: a father or mother; one who gives birth to or nurtures and raises a child
- Emotional readiness: responsibility; maturity, sacrifice, lifestyle change
- Financial readiness: costs of childrearing; impact on parental education: impact on employment decisions
- Unit – Practice Parenting
 - Make a “pretend” baby, using a five-pound bag of flour
 - “Parent” must take baby everywhere for a period of five days and must care for baby in the ways a real infant requires: feeding, diapering, comforting
 - Childcare arrangements must be made for any period of time when baby cannot be with parent
 - Period of practice parenting to be tracked in daily journal entries: record observations about the process
- Preventing unplanned pregnancy: Abstinence
 - Know the definition of abstinence: a voluntary restraint from indulging a desire or appetite for certain bodily activities (including sexual intercourse) that are widely experienced as giving pleasure.
 - The benefits of abstinence: guaranteed protection against pregnancy or sexually transmitted diseases; avoiding emotional consequences of sex; maintaining high moral standards; maintaining better, lasting relationships in the short- and long-term

If the Unexpected Happens

- Pregnancy
 - Conception and pregnancy: detecting pregnancy; prenatal care; valuable resources
- Childcare Options
 - Working v. Staying Home: career decisions; guilt and acceptance; balancing responsibilities

Childcare options/costs:

Daycare Center – child is taken to a daycare facility where other children are also cared for by a staff of childcare professionals

Cost: Average \$700 per month

In-Home Daycare – child is taken to a daycare operated in that childcare provider’s home

Cost: Average \$500 per month

Nanny – child is taken care of in their own home by a caretaker who exclusively cares for that child (or that family's children)

Cost: Average \$2400 per month

Relative Care – child is taken care of in a relative's home or relative takes care of child in the child's home

Cost: Often free or in exchange for other favors or responsibilities

Stay-at-Home Parent – child is taken care of in their own home by their own parent

Cost: Free (less the cost of income lost from leaving job)

- Child Stages and Development

- Your Baby: Newborn Care – crying, diapers, feedings, sleep issues, developmental milestones, healthcare, safety, baby gear/necessities
- Your Toddler: Toddler Development – walking, talking, finger foods, tantrums, potty training, boundaries, separation anxiety
- Your Preschooler – New Independence – playing and sharing with others, command of language, following directions, imaginative play, social and emotional skills, physical mastery

** These stages of a child's care and development require further, in-depth instruction. Refer to a local pediatrician or hospital to find additional resources. The following website also provides additional information on the first three years of a child's development: <http://www.zerotothree.org/>*

- The Family Unit

- Parental relationship: the impact of children on a relationship – new pressures and responsibilities, less time spent alone and together as a couple, renews commitment, enhances cooperation as a couple
- Family: functions to produce and socialize children; plays a role in productive citizenship; role of family shifts throughout child's life

Grade Nine Study Skills

The Learning Process

- Learning takes place in stages. These stages are most widely recognized as those identified and examined by neuropsychologist Benjamin Bloom.
Bloom's learning levels include (from the lowest level of thinking to the highest):
 - Knowledge – repeats memorized information verbatim
 - Comprehension – restates information, showing evidence of understanding
 - Application – applies learning to new situations or to problem solving

- Analysis – breaks data into parts, detecting relationships and organization
- Synthesis – uses creativity and originality to develop new ideas or products
- Evaluation – makes value judgments and decisions; supports views

Learning Attitudes

- What is an attitude?

The approach you take to a task; attitude is a reflection of the amount of interest you have in a task

A positive attitude affects studying in the following ways:

- Provides a clear pictures of your role in the learning process
- Allows you to establish clear learning goals
- Enables you to study more efficiently
- Results in better grades and academic performance

How to develop a positive attitude toward studying:

- Accept responsibility for learning information
- Become an active participant in the learning process (actively listening, asking questions)
- Determine what results are desired from a class, project, test, etc.
- Ask for help; seek support from others
- Take care of yourself (adequate sleep, nutrition, hygiene, etc.)

Concentration and Memory

- Concentration and memory are important components of academic performance

The following are tips to enhance concentration and ensure your learning is stored in your memory:

- Attach a strong emotional connection (such as a personal memory) to the material
- Rewrite the material; summarize your notes
- Create a song about the material or change the words to an existing song
- Draw a picture using bold colors
- Repeat and review the material in regular intervals (after 10 minutes, 48 hours, etc.)
- Apply what you have learned in your daily life and normal activities
- Use acronyms and other strategies for memorization

- Write about the material in a journal

The following are tips to help you search for lost memories:

- Say or write down everything you can remember relating to the memory you have lost
- Recall events or information in a different order
- Recreate the learning environment or replay the event (include sounds, smells, people, feelings, etc.)

Grade Nine Survey of Careers

Introduction to Careers

- What is a career?
The general course or progression of one's working life or professional achievements
- How do you choose the right career for you?

Learn about yourself: By identifying information about yourself, you will be able to determine what types of careers you are most suited for and eliminate career paths that might result in wasted time, money and other resources. It is important to consider the following:

- Values – what are the things that are most important to you? (status, achievement, freedom, security, financial gain, social contribution)
 - Interests – what are the things you most enjoy doing or learning about?
 - Personality – what are some of your individual traits, needs and attitudes?
 - Skills – what activities do you excel at?
- What are your work motivations?

There are seven primary areas of motivation that correspond to different career fields. These areas often overlap or work in combination with one another; the following are examples of careers based on each single area of motivation:

1. Words

People with a preference for words may want to make a living out of working with words – either creatively or for information or communication.

Examples of “Word” Careers:

- Writer
- Editor
- Historian
- Interpreter
- Journalist
- Language Teacher

- Librarian
- Literary Critic

2. Art

People with a preference for art often want a career in which they can express themselves and use their imagination. These individuals may also choose a career path that allows them freedom to create and explore.

Examples of “Art” Careers:

- Artist
- Architect
- Interior Designer
- Make-up Artist
- Musician
- Sculptor
- Florist
- Dancer
- Fashion Designer

3. Physical

People with a preference for physical activity may seek work that allows them to engage in sports or other active outlets – these people often find ways to interact with their environments in a “hands on” manner.

Examples of “Physical” Careers:

- Farmer
- Builder
- Fisherman
- Butcher
- Mechanic
- Park Ranger
- Upholsterer
- Baker
- Cook
- Driver

4. Experimenting

People with a preference for experimentation (acquiring knowledge, observing results, analyzing information) may seek work that requires precise study and work – these people often enjoy exploring opportunities in a changing environment (such as technology and science).

Examples of “Experimenting” Careers:

- Astronomer
- Chemist
- Dietician
- Experimental Psychologist
- Mathematician
- Surgeon
- Laboratory Technician

5. Organization

People with a preference for organization may seek work that involves administration (the effective use of people and resources) – these people often thrive in positions where they coordinate the efforts of others.

Examples of “Organization” Careers:

- Accountant
- Auditor
- Legal Executive
- Secretary/Administrative Assistant
- Securities Analyst
- Tax Inspector
- Administrator

6. Business

People with a preference for business are motivated by an opportunity to earn a living in their own way – these people are often entrepreneurs (who start their own businesses) or strive for high productivity and profit for the companies they work for.

Examples of “Business” Careers:

- Broker
- Business Consultant
- Managing Director
- Marketing Manager
- Politician
- Retail Manager
- Negotiator

7. Social

People with a preference for social activity often seek work that makes people the main objective – careers in this area are geared toward helping and interacting with other people.

Examples of “Social” Careers:

- Ambulance Crew
- Career Counselor
- Nurse/Midwife
- Probation Officer
- Remedial Teacher

*** There are many instances when these areas of motivation overlap or combine – for example, an individual may have a strong preference for words AND art and would be happiest in a career that combines the two (example: acting, communications, etc.)

- Career Assessment Resources:

Libraries and school career centers often offer computer-assisted career guidance programs that enable users to identify their career choices and learn more about different careers. Useful programs include:

- SIGI 3 (System of Interactive Guidance and Information) – an educational and career planning software for the Internet integrates self-assessment with in-depth and up-to-date career information
- Discover – a comprehensive career guidance and information software system

Professional career counselors can administer highly-specialized tests to help people in the self-assessment process; these counselors typically administer and interpret some of the following tests:

- Minnesota Importance Questionnaire

- Survey of Interpersonal Values
- Temperament and Values Inventory
- Myers-Briggs Type Indicator
- Additional Career Considerations:
Once you have identified potential careers, you must then explore your personal options in pursuing these paths. Factors to consider include:
 - Time: How much time are you willing to spend on advancing or acquiring new skills required of this career path?
 - Family: What are your family responsibilities and how will they affect your pursuit of this career path?
 - Money: Do you have the financial ability to pay for education and training required of this career path?
 - Career Outlook: What is the state of employment in this career path? Will there be a need for people in this field? Research the career to learn about its history and future forecasts.
 - Confidence: Are you prepared to stand behind your career decision and explain your choice to others? Your career choice may affect important people in your life and it is critical to prepare yourself with information that supports your decision to pursue this path.
 - Alternatives: Have you determined some alternatives to your chosen career path? It is important to have more than one plan in place for your career. In fact, it is a good idea to continue exploring career alternatives throughout your working life.
 - Education: Formal education is required for many career fields, making some career paths more difficult or unappealing due to financial limitations, time constraints or a personal dislike for academics.
- Financial support is available to assist individuals with their education/training:
 - Federal Financial Aid:
U.S. Department of Education
<http://www.studentaid.ed.gov> or call 1-800-4-Fed-Aid (1-800-433-3243)
 - State Financial Aid:
Contact your state's higher education agency at:
http://bc01102.ed.gov/Programs/EROD/org_listcfm?category_ID=SHE
 - Volunteer/Service Programs:
AmeriCorps: <http://www.americorps.org> or 1-800-942-2677
Peace Corps: <http://www.peacecorps.gov/index.cfm> or 1-800-424-8580
 - Free Scholarship and Grant Resources:
 - College is Possible <http://www.collegeispossible.org>
 - College Boards Pay for College <http://www.collegeboard.com>
 - FastAid <http://www.fastaid.com/>
 - FastWeb <http://www.fastweb.com/>
- Many worthwhile career paths require little or no formal education including:
 - Auto Mechanic

- Carpenter
- Electrician
- Food Service Manager
- Telecommunications Installer
- Postal Service Worker
- Truck Driver
- Police Officer
- Administrative Assistant
- Real Estate Agent
- Transportation Worker
- Entrepreneur

Grade Nine Entrepreneurship

What is Entrepreneurship?

Entrepreneurship is the act of being an entrepreneur. What is an entrepreneur?

- An individual who organizes a business venture and assumes the risks and responsibilities for it

What is the difference between an entrepreneur and an inventor?

- Every entrepreneur is an inventor; few inventors are entrepreneurs
- An inventor asks "What is missing in this picture?" then creates a solution to fill a need
- An entrepreneur asks the same question, creates a solution to fill a need and develops a business to offer the solution to others
- An inventor's invention is their product; an entrepreneur's business is their product

Famous entrepreneurs:

- Levi Strauss – founder of Levi's Jeans
 - o Identified demand for "waist overalls" (jeans). Supervised manufacturing from small-scale (seamstresses working out of their homes) to large-scale (multiple production factories)
- Walt Disney – founder of Disney enterprise
 - o Creator of Mickey Mouse, Disney theme parks and various other related ventures. Widely recognized for his invention of the multiplane camera that brought richer animation to film (first seen in his production of *Snow White and the Seven Dwarfs*. Expanded Disney enterprise to include multimedia ventures, television programming, corporate partnerships, commercial products, etc.
- Bill Gates – founder, chairman and CEO of Microsoft Corp.
 - o Developed an operating system for the personal computer (PC). Retained rights to the program and launched his own software company for the software, resulting in "Microsoft" operating more than 90 percent of all desktop computers worldwide.

Enterprise has expanded to include a variety of other ventures ranging from online entertainment to automobiles.

*These and other effective entrepreneurs have all demonstrated key traits including passion, intellect, vision, joy and leadership (further examined in following section)

Tenth Grade

Free World U

Algebra II

Algebra II Basics

- Absolute Value
Students solve equations and inequalities involving absolute value
- Linear Equations and Inequalities
Students solve systems of linear equations and inequalities (in two or three variables) by substitution, with graphs, or with matrices
- Operations on Polynomials
Students are adept at operations on polynomials, including long division
- Factoring Polynomials
Students factor polynomials representing the difference of squares, perfect square trinomials, and the sum and difference of two cubes
- Real and Complex Numbers
Students demonstrate knowledge of how real and complex numbers are related both arithmetically and graphically. In particular, they can plot complex numbers as points in the plane
- Manipulating Complex Numbers
Students add, subtract, multiply, and divide complex numbers

Rational Expressions

- Manipulating Rational Expressions
Add, subtract, multiply, divide, reduce, and evaluate rational expressions with monomial and polynomial denominators
- Simplifying Rational Expressions
Simplify complicated rational expressions including those with negative exponents in the denominator

Quadratic Equations and Functions

- Solving Quadratic Equations
Solve and graph quadratic equations by factoring, completing the square, or using the quadratic formula; apply techniques to solve word problems; solve quadratic equations in the complex number system
- Changing a Coefficient
Demonstrate and explain the effect that changing a coefficient has on the graph of quadratic functions; e.g., how the graph of a parabola changes as a, b, and c vary in the equation $y = a(x-b)^2 + c$
- Graphing Quadratic Functions
Students graph quadratic functions and determine the maxima, minima, and zeros of the function
- Effects of Coefficients
Students demonstrate and explain how the geometry of the graph of a conic section (e.g., asymptotes, foci, eccentricity) depends on the coefficients of the quadratic equation representing it

- Applying the Quadratic Equation
Given a quadratic equation of the form $ax^2 + by^2 + cx + dy + e = 0$, students can use the method for completing the square to put the equation into standard form and can
- Graphing Quadratic Equations
Students can recognize whether the graph of a quadratic equation in standard form is a circle, ellipse, parabola, or hyperbola, then graph the equation

Exponential and Logarithmic Functions

- Laws of Logarithms
Students prove simple laws of logarithms
- Inverse Relationships
Students understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents
- Validity of an Argument
Students judge the validity of an argument according to whether the properties of real numbers, exponents, and logarithms have been applied correctly at each step
- Exponents
Students know the laws of fractional exponents, understand exponential functions, and use these functions in problems involving exponential growth and decay
- Translate Between Logarithms
Students use the definition of logarithms to translate between logarithms in any base
- Logarithmic Expressions
Students understand and use the properties of logarithms to simplify logarithmic numeric expressions and to identify their approximate values

Probability and Statistics

- Computing Combinations and Permutations
Students use fundamental counting principles to compute combinations and permutations
- Computing Probabilities
Students use combinations and permutations to compute probabilities
- Binomial Theorem
Students know the binomial theorem and use it to expand binomial expressions that are raised to positive integer powers
- Mathematical Induction
Students apply the method of mathematical induction to prove general statements about the positive integers

Arithmetic and Geometric Series

- Finding the General Term and Sums
Students find the general term and the sums of arithmetic series and of both finite and infinite geometric series

- Deriving Summation Formulas
Students derive the summation formulas for arithmetic series and for both finite and infinite geometric series

Trigonometric Functions

- Problems Involving Functional Concepts
Students solve problems involving functional concepts, such as composition, defining the inverse function and performing arithmetic operations on functions
- Justifying Steps
Students use properties from number systems to justify steps in combining and simplifying functions

Analyzing Algebraic Statements

- Analyzing Algebraic Statements
Students determine whether a specific algebraic statement involving rational expressions, radical expressions, or logarithmic or exponential functions is sometimes true, always true, or never true

Earth Sciences

Earth's Place in the Universe

- Differences and Similarities in Our System
Students know how the differences and similarities among the sun, the terrestrial planets, and the gas planets may have been established during the formation of the solar system
- Evidence of Our System's Age
Students know the evidence from Earth and moon rocks indicates that the solar system was formed from a nebular cloud of dust and gas approximately 4.6 billion years ago
- Early Earth
Students know the evidence from geological studies of Earth and other planets suggest that the early Earth was very different from Earth today
- Distances From Earth
Students know the evidence indicating that the planets are much closer to Earth than the stars are
- Our Sun
The Sun is a typical star and is powered by nuclear reactions, primarily the fusion of hydrogen to form helium;
- Evidence of Asteroid Impacts
Students know the evidence for the dramatic effects that asteroid impacts have had in shaping the surface of planets and their moons and in mass extinctions of life on Earth
- Milky Way Galaxy
Students know the solar system is located in an outer edge of the disc-shaped Milky Way galaxy, which spans 100,000 light years
- Other Galaxies
Students know galaxies are made of billions of stars and comprise most of the visible mass of the universe

- Nuclear Fusion in Stars
Students know the evidence indicating that all elements with an atomic number greater than that of lithium have been formed by nuclear fusion in stars
- Differences in Stars
Students know that stars differ in their life cycles and that visual, radio, and X-ray telescopes may be used to collect data that reveal those differences

Dynamic Earth Processes

- Plate Tectonics
Features of the ocean floor (magnetic patterns, age, and sea-floor topography) provide evidence of plate tectonics; the principal structures that form at the three different kinds of plate boundaries
- Properties of Rocks
Students know how to explain the properties of rocks based on the physical and chemical conditions in which they formed, including plate tectonic processes
- Earthquakes
Students know why and how earthquakes occur and the scales used to measure their intensity and magnitude
- Volcanoes
Students know there are two kinds of volcanoes: one kind with violent eruptions producing steep slopes and the other kind with voluminous lava flows producing gentle slopes

Energy in the Earth System

- Amounts of Energy
Students know the relative amount of incoming solar energy compared with Earth's internal energy and the energy used by society
- Solar Radiation
Students know the fate of incoming solar radiation in terms of reflection, absorption, and photosynthesis
- Greenhouse Effect
Students know the different atmospheric gases that absorb the Earth's thermal radiation and the mechanism and significance of the greenhouse effect
- Differential Heating of Earth
Students know how differential heating of Earth results in circulation patterns in the atmosphere and oceans that globally distribute the heat
- Weather and Rotation of Earth
Students know the relationship between the rotation of Earth and the circular motions of ocean currents and air in pressure centers
- Temperature Inversions
Students know the origin and effects of temperature inversions
- Properties of Ocean Water
Properties of ocean water can be used to explain the layered structure of the oceans, the generation of horizontal and vertical ocean currents, and the geographic distribution of marine organisms

- Rain Forests and Deserts
Students know rain forests and deserts on Earth are distributed in bands at specific latitudes
- Weather and the Atmosphere
Students know weather (in the short run) and climate (in the long run) involve the transfer of energy into and out of the atmosphere
- Various Effects on Climate
Students know the effects on climate of latitude, elevation, topography, and proximity to large bodies of water and cold or warm ocean currents
- Climate Changes Over Time
Students know how Earth's climate has changed over time, corresponding to changes in Earth's geography, atmospheric composition, and other factors, such as solar radiation and plate movement

Biogeochemical Cycles

- Cycles
Students know the carbon cycle of photosynthesis and respiration and the nitrogen cycle
- Global Carbon Cycle
Students know the global carbon cycle: the different physical and chemical forms of carbon in the atmosphere, oceans, biomass, fossil fuels, and the movement of carbon among these reservoirs
- Movement of Matter
Students know the movement of matter among reservoirs is driven by Earth's internal and external sources of energy

Earth's Atmosphere

- Atmosphere Structure and Composition
Students know the thermal structure and chemical composition of the atmosphere
- Changes in the Atmosphere
Students know how the composition of Earth's atmosphere has evolved over geologic time, the effect of outgassing, the variations of carbon dioxide concentration, and the origin of atmospheric oxygen
- The Ozone Layer
Know the location of the ozone layer in the upper atmosphere, its role in absorbing ultraviolet radiation, and the way in which this layer varies both naturally and in response to human activities

California Geology

- Economic Resources and Geology
Students know the resources of major economic importance in California and their relation to California's geology
- Natural Hazards and Geology
Students know the principal natural hazards in different California regions and the geologic basis of those hazards

- California's Water
Students know the importance of water to society, the origins of California 's fresh water, and the relationship between supply and need

Grade Ten Social Studies

Judeo-Christian and Greco-Roman Ideas

- Judeo-Christian and Greco-Roman Ideas
Similarities and differences in Judeo-Christian and Greco-Roman views of law, reason and faith, and duties of the individual; influence of their moral and ethical principles to the development of Western political thought
- Rule of Law
Development of the Western political ideas of the rule of law and illegitimacy of tyranny; Plato's Republic and Aristotle's Politics
- Influence of the U.S. Constitution
Its influence on political systems in the contemporary world

Modern Revolutions and Their Effects

- Philosophers
Major ideas of philosophers; their effects on the democratic revolutions in England, the United States, France, and Latin America; John Locke, Charles-Louis Montesquieu, Jean-Jacques Rousseau, Simón Bolívar, Thomas Jefferson, James Madison
- Important Documents
Principles of the Magna Carta, the English Bill of Rights (1689), the American Declaration of Independence (1776), the French Declaration of the Rights of Man and the Citizen (1789), and the U.S. Bill of Rights (1791)
- The American Revolution
Unique character of the American Revolution; its spread to other parts of the world; its continuing significance to other nations
- French Revolution
How the ideology of the French Revolution led France to develop from constitutional monarchy to democratic despotism to the Napoleonic Empire
- Nationalism
How nationalism spread across Europe with Napoleon; how it was repressed for a generation under the Congress of Vienna and Concert of Europe until the Revolutions of 1848

Effects of the Industrial Revolution

- England
Why England was the first country to industrialize
- Scientific and Technological Changes
How scientific and technological changes and new forms of energy brought about massive social, economic, and cultural change; inventions and discoveries of James Watt, Eli Whitney, Henry Bessemer, Louis Pasteur, Thomas Edison

- Urbanization
Growth of population, rural to urban migration, growth of cities associated with the Industrial Revolution
- Work and Labor
Evolution of work and labor; demise of the slave trade; effects of immigration, mining and manufacturing, division of labor, and the union movement
- The Industrial Economy
Connections among natural resources, entrepreneurship, labor, and capital in an industrial economy
- Rise of Capitalism
Emergence of capitalism as a dominant economic pattern; responses to it, including Utopianism, Social Democracy, Socialism, and Communism
- Trends in Art and Literature
Emergence of Romanticism in art and literature - the poetry of William Blake and William Wordsworth; social criticism - the novels of Charles Dickens; the move away from Classicism in Europe

The Era of New Imperialism

- Industrial Economies
Rise of industrial economies; their link to imperialism and colonialism; role played by national security and strategic advantage; moral issues raised by the search for national hegemony; Social Darwinism; the missionary impulse; material issues such as land, resources, and technology
- Colonial Rule
Locations of the colonial rule of such nations as England, France, Germany, Italy, Japan, the Netherlands, Russia, Spain, Portugal, and the United States
- Imperialism
Imperialism from the perspective of the colonizers and the colonized; the varied immediate and long-term responses by the people under colonial rule, including in Africa, Southeast Asia, China, India, Latin America, and the Philippines
- Struggles for Independence
Independence struggles of the colonized regions of the world, including in Africa, Southeast Asia, China, India, Latin America, and the Philippines; roles of leaders, such as Sun Yat-sen in China; roles of ideology and religion

Causes and Course of the First World War

- Outbreak of War
Arguments for entering into war presented by leaders from all sides of the Great War; role of political and economic rivalries, ethnic and ideological conflicts, domestic discontent and disorder, and propaganda and nationalism in mobilizing the civilian population in support of "total war"
- Conduct of the War
Principal theaters of battle; major turning points; importance of geographic factors in military decisions and outcomes - topography, waterways, distance, climate
- Course and Outcome
How the Russian Revolution affected the course and outcome of the war; how the entry of the United States affected the course and outcome of the war

- Human Costs
Nature of the war; its human costs, military and civilian, on all sides of the conflict; how colonial peoples contributed to the war effort
- Human Rights and Genocide
Human rights violations and genocide; the Ottoman government's actions against Armenian citizens

Effects of the First World War

- Post-War Negotiations
Aims and negotiating roles of world leaders; terms and influence of the Treaty of Versailles and Woodrow Wilson's Fourteen Points; causes and effects of the United States' rejection of the League of Nations on world politics
- Political and Economic Effects of the War
Effects of the war and resulting peace treaties on population movement, the international economy, and shifts in the geographic and political borders of Europe and the Middle East
- Social Effects of the War
Widespread disillusionment with prewar institutions, authorities, and values that resulted in a void that was later filled by totalitarians
- Effects on Culture
Influence of World War I on literature, art, and intellectual life in the West; Pablo Picasso; the "lost generation" of Gertrude Stein; Ernest Hemingway

Rise of Totalitarian Governments

- The Russian Revolution
Causes and consequences of the Russian Revolution; Lenin's use of totalitarian means to seize and maintain control - the Gulag
- Stalin
Stalin's rise to power in the Soviet Union; connection between economic policies, political policies, the absence of a free press, and systematic violations of human rights; the Terror Famine in Ukraine
- Totalitarian Regimes
The rise, aggression, and human costs of totalitarian regimes, Fascist and Communist, in Germany, Italy, and the Soviet Union; their common and dissimilar traits

Causes and Consequences of World War II

- Drives for Empire
German, Italian, and Japanese drives for empire in the 1930s; 1937 Rape of Nanking; other atrocities in China; Stalin-Hitler Pact of 1939
- Appeasement
Role of appeasement and nonintervention (isolationism); domestic distractions in Europe and the United States prior to the outbreak of World War II
- Conduct of the War
Major turning points of the war; principal theaters of conflict; key strategic decisions

- World War II Influences and Outcomes
Location of Allied and Axis nations on a map, Importance of geographic factors, Resulting War conferences and political resolutions
- Important Leaders
Political, diplomatic, and military leaders during the war;., Winston Churchill, Franklin Delano Roosevelt, Emperor Hirohito, Adolf Hitler, Benito Mussolini, Joseph Stalin, Douglas MacArthur, Dwight Eisenhower
- The Holocaust
Nazi policy of pursuing racial purity, especially against the European Jews; its transformation into the Final Solution; the Holocaust that resulted in the murder of six million Jewish civilians
- Human Costs
Human costs of the war; civilian and military losses in Russia, Germany, Britain, the United States, China, and Japan

The Post-World War II World

- Post-War Changes
Economic and military power shifts caused by the war; the Yalta Pact; development of nuclear weapons; Soviet control over Eastern European nations; economic recoveries of Germany and Japan
- The Cold War
Causes of the Cold War, with the free world on one side and Soviet client states on the other; competition for influence in such places as Egypt, the Congo, Vietnam, and Chile
- American Postwar Policy
Importance of the Truman Doctrine and the Marshall Plan, which established the pattern for America's postwar policy of supplying economic and military aid to prevent the spread of Communism; economic and political competition in arenas such as Southeast Asia (Korean War, Vietnam War) Cuba, and Africa
- China
Chinese Civil War; rise of Mao Tse-tung; subsequent political and economic upheavals in China - Great Leap Forward, the Cultural Revolution, and the Tiananmen Square uprising
- Resistance to Soviet Domination
Uprisings in Poland (1952), Hungary (1956), and Czechoslovakia (1968)
- Renewed Resistance to Soviet Domination
Resurgence of resistance to Soviet Domination in the 1970s and 1980s taking place in Poland, Hungary, and Czechoslovakia as people in Soviet satellites sought freedom from Soviet control.
- Middle East
How the forces of nationalism developed in the Middle East; how the Holocaust affected world opinion regarding the need for a Jewish state; significance and effects of the location and establishment of Israel on world affairs
- Collapse of the Soviet Union
Reasons for the collapse of the Soviet Union; weakness of the command economy; burdens of military commitments; growing resistance to Soviet rule by dissidents in satellite states and the non-Russian Soviet republics

- International Organizations and Alliances
Establishment and work of the United Nations; purposes and functions of the Warsaw Pact, SEATO, NATO, and the Organization of American States

Nation-Building in the Contemporary World

- Challenges
Challenges in the regions, including the Middle East, Africa, Mexico and other parts of Latin America, and China; their geopolitical, cultural, military, and economic significance; international relationships in which they are involved
- Politics and Society
Recent history of the regions, including the Middle East, Africa, Mexico and other parts of Latin America, and China; political divisions and systems; key leaders; religious issues; natural features; resources; population patterns
- Important Trends
Important trends in the regions today, including the Middle East, Africa, Mexico and other parts of Latin America, and China; whether they appear to serve the cause of individual freedom and democracy

The World Economy

- Globalization
Characteristics; economic, social, and political effects
- Technology
Television, satellites, computers

Grade Ten Health

Injury Prevention and Emergency Care Procedures

- At Home
- At a Workplace
- In the Community

Health Careers

- Health Promotion
- Health Care
- Injury Treatment

Maintaining and Improving Body System Functions

- Exercise
- Nutrition
- Safety

Effects of Health Habits on the Body

- Immediate Effects
- Long-Term Effects

Effects of Conflict and Violence on Health

- Effects on Individuals
- Effects on Families
- Effects on Communities

Strategies to Prevent Conflict and Resolve Differences

- Prevent Negative Emotion
- Cooperation
- Listening Skills
- Mediation
- Understanding Cultural Diversity

Effects of Stress and Divorce on Family and Society

- Divorce and/or Separation
- Effect of Family Stress and Separation/Divorce on the Family
- Effect of Family Stress and Separation/Divorce on Society

Grade Ten Spanish I

Vocabulary (existing content from “Tenth Grade – Exploring Foreign Languages Spanish)

Grammar (existing content from “Tenth Grade – Exploring Foreign Languages Spanish)

Phrases (existing content from “Tenth Grade – Exploring Foreign Languages Spanish)

Pronunciation (overlaps with and expands on existing content in “Eleventh Grade - Spanish I”)

- Sounding “native” – regions, dialects
- Pronunciation goals – how fluency is achieved
- Learning the alphabet
- Learning the vowels
- Learning the consonants
- Accent marks

Subjects (new topic area)

- Introduction to subjects – “Who are you?”

- Plurals
- Articles
- Nouns and pronouns
- Forms of “You”
- Conjunctions

Verbs (overlaps with and expands on existing content in “Eleventh Grade Spanish I”)

- Introduction to verbs – “What do you do?”
- Conjugation
- Moods
- Infinitives
- Present tense
- Introduction to “Ser” – “Who are you?”
- Introduction to “Estar” – “How are you?”
- Additional verb tenses
- Significant verbs (to have, to be, to go, to know)
- Irregular verbs

Grade Ten French I

Vocabulary (existing content from “Tenth Grade – Exploring Foreign Languages French”)

Grammar (overlaps with and expands on existing content from “Tenth Grade – Exploring Foreign Languages French”)

- Introduction to French articles
- Definite articles
- Indefinite articles
- Partitive article
- Introduction to nouns
- Gender of nouns (existing content area)
- Formation of plurals
- Family names
- Irregular plurals

Phrases (existing content from “Tenth Grade – Exploring Foreign Languages French” **AND** “Eleventh Grade – French I”)

Pronunciation (overlaps with and expands on existing content from “Eleventh Grade - French I”)

- The alphabet
- Pronunciation rules
- Punctuation marks

Subject Pronouns and Present-Tense Verbs (new topic area)

- Introduction to subject pronouns
- Verb forms: the infinitive
- Verb forms: the present tense
- Irregular verbs and irregular verbs ending in “oir” and “ir”
- Idiomatic expressions
- Present participle

Questions and Commands (new topic area)

- Introduction to “Est-ce que”
- Intonation
- Inversion
- Questions about people
- General questions
- Giving orders (imperative verb form)

Negating Words and Phrases (new topic area)

- Negative expressions
- Negative construction
- Negative pronouns (“Rien” and “Personne”)
- Negative adverbs
- Articles and negative expressions
- Responding to negative questions

Grade Ten German I

Vocabulary (existing content from “Tenth Grade – Exploring Foreign Languages German”)

Pronunciation (new topic area)

- The alphabet
- Pronouncing vowels
- Pronouncing consonants
- Letter combinations

Phrases (existing content from “Tenth Grade – Exploring Foreign Languages German”)

Grammar (overlaps with and expands on existing content from “Tenth Grade – Exploring Foreign Languages German”)

- Capitalization
- Gender of nouns (existing content area)
- Exceptions to gender patterns
- Indefinite articles

Plurals and Pronouns (new topic area)

- Easy plurals
- Plural of masculine nouns
- Plural of feminine nouns
- Plural of neuter nouns
- “He,” “She,” and “It”
- “You” and “I”
- Plural pronouns
- “Du,” “ihr,” and “Sie”
- Describing nouns

Verbs (new topic area)

- Conjugation

- The verb “sein”
- Verbs of motion: coming and going
- Verbs ending in “-ieren”
- The verb “bitten”
- Special uses of “Du” and “Sie”
- Negation with “Not” and “Not any”

Irregular Verbs (new topic area)

- The verb “haben”
- The word “morgen”
- Stem changes in present tense
- Uses of “warden”
- Prefixes and verbs of motion

Direct Objects and Accusative Case (new topic area)

- Introduction to direct objects
- The English direct object
- The German direct object
- Nominative and accusative
- Adjectives with direct objects
- Prepositions with the accusative
- “Es gibt”
- Useful idioms

Indirect Objects and Dative Case (new topic area)

- Introduction to indirect objects
- The German indirect object
- Changing dative nouns to pronouns
- Sentences and pronouns
- Prepositions with the dative case
- Additional uses of the dative case

Forming Questions (new topic area)

- The three types of questions
- Placing a verb first
- Interrogative words
- Asking “Where?”
- Asking “How?” and “When?”
- Asking “Who?”
- Asking “What kind” and “Why?”
- Other cases of “wer”

Grade Ten Sociology

Social Equality

- Demographics

What are demographics?

Demographics are the characteristics of a [human population](#) (typically used for purposes of government, marketing and research); commonly used demographics include income, [race](#), sex and gender.

- Class

What is the class system?

- The class system is a way of classifying groups of people based on ownership of resources and occupation (i.e. income).
- The class system in the United States is characterized by unequal distribution of resources (example: people in the upper class have a lot; people in the lower class have little)
- Consequences of the class system:
 - Upper class individuals have greater access to resources and, as a result, are able to explore more opportunities
 - Lower class individuals have limited access to resources and, as a result, must spend their limited resources on basic necessities rather than on exploring new opportunities

- Race and Ethnicity

What is race?

- A race is a category of people who have been singled out as inferior or superior, usually on the basis of physical characteristics such as skin color, hair texture or eye shape.

What is ethnicity?

- An ethnic group is a collection of people distinguished primarily by cultural or national characteristics including cultural traits, customs, community, membership, etc.

Groups are often further classified by majority and minority groups.

- The majority (dominant) group is the group with more resources and rights in society
- The minority (subordinate) group is the group subjected to unequal treatment by the minority group

- Sex and Gender

What is the difference between sex and gender?

- Sex refers to the biological components of what is “female” or “male” (what we are born with)
- Gender refers to the socially constructed differences between females and males (what is attained through socialization)

Gender socialization reinforces what behaviors are considered “appropriate” for each gender. The agents of gender socialization include:

- Parents
- Peers
- Teachers
- Schools

- Sports
- Media

*Discussion Question: What are some of the inequalities you have witnessed based on class, race, ethnicity or gender?

Grade Ten Character Development

Character Awareness

- Appropriate Rebellion

Appropriate rebellion is the act of questioning authority when you believe that authority is wrong. Recognize that, in many cases, the authority can be wrong.

Historical examples:

- WW2 Germany's allegiance to loyalty and obedience above truth and love
- General Robert E. Lee's internal conflict in the Civil War (torn between his opposition to slavery and secession and his geographic loyalty to the South)

Discuss modern-day, practical instances where appropriate rebellion should be exercised.

Levels of Awareness

- Acceptance

Acceptance is the level of personal awareness characterized by the setting and achieving of goals. It marks a powerful shift where individuals believe in their competency and want to put it to a greater use. People in this stage accept responsibility for their role in the world and take proactive steps to living a better life.

- Reason

Reason is the level of personal awareness where people move away from the emotional aspects of the lower levels and adopt a purely rational perspective. People who reach this level become capable of using their reasoning abilities to explore their highest natural abilities to make meaningful contributions to the world. Most people never reach this level in a lifetime.

Character in Action

- Acceptance: At this level, individuals begin evaluating their lives and identify where they want their lives to lead them. People at this level often make changes in areas they are not happy with, particularly areas they believe will affect their future. Examples include a career change, new relationships or a modified diet.
- Reason: At this level, individuals reach a high level of reasoning, which they are able to put to use in the world around them. People at this level often make great contributions in fields like medicine and science, given their significant abilities to reason.

- Extend discussion of acceptance and reason, identifying factors that could cause individuals to shift from one level to the next.

Grade Ten Critical Thinking

Consumer Choice

- Sales and advertising techniques can be very influential. Commercials, magazine advertisements and Web banners are unavoidable in current popular culture – most people encounter thousands of commercial messages each day including:
 - Signs
 - Billboards
 - Brochures
 - Direct mail
 - Email advertisements
 - Radio advertisements
 - Television advertisements
 - Telemarketing
- To effectively evaluate commercial messages, it is important to:
 - Find similarities and differences between advertisements for different products
 - Categorize advertisements based on similar messages, imagery or theme
 - Identify the point of view presented in the advertisement
 - Evaluate individual choice and social responsibility
- Be a smart consumer
Smart consumers make purchasing decisions based on their income, demographics, needs and desires – not on commercial messages.
Smart consumers do the following:
 - Compare prices – advertised price savings may be misleading
 - Read carefully – review company policies, return policies, warranties, etc.
 - Get it in writing – have documents for all transactions
 - Research reliability – find out if companies are recommended; do product comparisons
 - Take your time – ask questions, consider potential problems, do not allow yourself to be pressured to make a purchase

Democratic Choice

- Politics can influence consumer thinking and decision making. Political messages appear in:
 - Speeches
 - Advertisements
 - News interviews
 - Debates
- *Interviews and debates are typically more balanced than speeches and advertisements because politicians do not completely control the context, criticism or environment.

In evaluating political arguments and campaigns, it is important to consider the following:

- What is the significance of this argument?
- What difference does this argument make to your understanding of politics?
- How does this argument affect the allocation of critical resources?
- How does this argument affect who wins in the political process?

Grade Ten Interpersonal Relationships

Husband/Wife Relationships

- Reasons couples get married:
 - Mutual love and admiration
 - Desire for companionship
 - Desire for commitment
 - Desire to raise children together
- Challenges in a marriage can include:
 - Gradual changes in the people who are married (as well as in the marriage itself)
 - Different communication styles (or lack of communication altogether)
 - Different interests, motivations, etc.
 - Lack of support for one another
- Important topics in marital communication can be covered by completing the following statements about one another:
 - In our marriage, I feel loved when you
 - In our marriage, I feel appreciated when you

- In our marriage, I am happiest when
- In our marriage, I am saddest when
- In our marriage, I am most angry when
- In our marriage, I would like more
- In our marriage, I would like less....
- In our marriage, I feel uneasy when
- In our marriage, I feel distant from you when
- My greatest concern about our marriage is
- The feelings that I have the most difficulty sharing with you are about
- The feelings that I can share most easily with you are
- Our marriage could be significantly improved if we make an effort to
- The thing in our marriage that needs the most attention is
- The best thing about our marriage is

Parent/Child Relationships

- A positive parent/child relationship is critical to both members of that relationship; a strong, successful relationship requires work by both parent and child.
- Tips for building a stronger bond between parent and child include the following:
 - Tell one another that you love them as much as possible
 - Share your beliefs and values and explain why you feel the way you do; ask questions of each other and answer questions honestly
 - Establish a name to call one another that has special meaning between the two of you
 - Develop and maintain a special bedtime ritual (reading, talking, etc.) where you spend time together
 - Help each other with various tasks and chores; ask for one another's opinions and demonstrate how much you value each other's insights
 - Eat meals together; allow mealtimes to become an opportunity for sharing and conversation
 - Seek one-on-one opportunities as much as possible; devote special time to each other without the company of other family members, friends, etc.
 - Respect each other's choices; you do not have to agree with each other's decisions, but be supportive and understanding as much as possible

- Make each other a priority; pay attention to each other and take advantage of time spent together

Grade Ten Cultural Literacy – Art, Architecture & Music

Musical Literacy

- What is music?

Music is an artistic form of auditory communication combining instrumental or vocal tones in a structured, ongoing manner.

- Musical periods (approximate dates, styles and influences):
 - Medieval (before 1450) – music developed during this period was created and refined over many centuries; the music was of a sacred influence and primarily characterized by slow rhythm and monophonic style (including the Gregorian chants and organum); most composers of this period remain unknown due to lack of written records from this time
 - Renaissance (1450 – 1600) – with this period of cultural revival, music evolved to include broader harmony and more complex structure; instrumental works became more common in this period as did dramatic works and some of the earliest operas; Renaissance composers ranged from Johannes Ockeghem to Claudio Monteverdi; the musical styles of this period spread rapidly throughout Europe
 - Baroque (1600 – 1750) – this period marked a shift away from the severity of Medieval and early Renaissance music to more highly ornamented melodies; the Baroque style of music is dramatic and highly precise with great emphasis on vocal and instrument; the most famous composers of this style include Johann Sebastian Bach, George Frederick Handel and Antonio Vivaldi
 - Classical (1750 – 1820) – this period marked another revolution in music with the emergence of the Galant style (an emphasis on musical form and clarity); Mozart was an early leader in this musical period and it concluded with the early works of Beethoven
 - Romantic (1810 – 1910) – this period led to a less restricted, less formal style of music; whereas classical music was characterized by intellectuality and precision, romantic music focused on sentiment, imagination and effect; string quartets, symphonies and piano sonatas were prevalent in this period; Beethoven continued his influence in the period of Romantic music and many others followed his lead
 - Modern (1945 – present) – this period represents a broad variety of styles including Serialism, Minimalism and Electronic music; the works within this period are considered more accessible and approachable than previous styles; the Modern period incorporates any significant changes to music since the Romantic period
- Notable composers and masterpieces:

Italian:

- Claudio Monteverdi – the earliest opera genius; known for his Baroque style of opera demonstrated in his masterpieces *Orfeo* and *L'Incoronazione di Poppea*
- Gioacchino Antonio Rossini – a composer of “opera buffa” (opera featuring comic depiction of everyday life and people); known for his masterpiece *The Barber of Seville*
- Giuseppe Verdi – called “Mr. Opera” for his major influence on Italian opera; considered the greatest composer of the opera tradition; recognized for his compelling stories and universal themes; his most popular operas are *Rigoletto*, *Il Trovatore* and *La Traviata*
- Giacomo Puccini – a composer known for his widely popular and profitable operas including *Tosca*, *La Boheme* and *Madame Butterfly*
- Enrico Caruso – the first opera singer to be recorded; as a result, his fame was ongoing long after his death

German:

- Wolfgang Amadeus Mozart – an Austrian composer who began composing at the age of 5; he is largely associated with classical music
- Ludwig van Beethoven – a classical pianist famous for his nine symphonies; helped shape the foundation of classical music; composed only one opera, *Fidelio*, which did not adhere to operatic structure but had many followers
- Christoph Willibald von Gluck – a reformer of opera who attempted to strike a balance of power with drama and music; his operas including *Orfeo ed Euridice* were well respected but received little following as they did not hold the appeal of opera tradition
- Richard Wagner – another reformer of opera who had great influence with his vision and style; he composed his pieces with a combination of poetry, drama, music and stagecraft; known for his very lengthy masterpieces *Tannhäuser* and *Tristan and Isolde*
- Alban Berg – the most influential modern opera composer; worked with post-Freudian themes in his works such as *Wozzeck* and *Lulu*

French:

- Giacomo Meyerbeer – originally from Germany, he was a composer who found success in France and became the “master of the grand opera” for his masterpiece *Les Huguenots*
- Louis-Hector Berlioz – a controversial figure in opera; his compositions were either loved or hated for their unconventional style; his biggest masterpiece was *Les Troyens (The Trojans)*

English:

- Henry Purcell – known as England’s “Great White Hope” as he died young before he could reach his potential or revolutionize English opera the way many suspected he would; he composed the only English opera to ever receive worldwide acclaim, *Dido and Aeneas*
- George Frideric Handel – although he lived in London, this German-born composer wrote Italian operas including *Orlando*, *Geulio Cesare* and *Rinaldo*; he was envied by many English composers for the success of his works

Russian:

- Peter Ilyich Tchaikovsky – the creator of three of the most famous classical ballets (*The Nutcracker*, *Sleeping Beauty* and *Swan Lake*); he was a Russian composer recognized for his romantic compositions including operas, symphonies, songs and ballets
- Modest Petrovich Moussorgsky – known as Russia’s number-one “operatic son”; his one complete opera *Boris Godunov* was recognized for its drama and intensity

American:

- Douglas Moore – explored American regionalism through his music; best known for his operas *The Devil and Daniel Webster* and the *Ballad of Baby Doe*
- Virgil Thomson – a music critic and composer recognized for his masterpieces *Four Saints in Three Acts* and *The Mother of Us All*
- Gian Carlo Menotti – an Italian-American who helped bring opera to mass audiences and introduce it to television; famous for many of his operas including *The Medium*, *The Consul* and *Amahl and the Night Visitors*
- Philip Glass – a postmodernist associated with the use of repetition, electronic and media technology; famous for his masterpieces *Einstein on the Beach* and *Satyagraha*

*Discussion Question: What current day musical styles and musicians do you see making a lasting impression in musical history? Why do you think their influence will be significant?

Music Theory

- What is music theory?

Music theory defines and describes various pieces of music in terms of their similarities and differences in basic musical elements including rhythm, melody, harmony, timbre and texture; music is generally grouped into genres based on similarities in these elements.

- The basic elements of music:

- Rhythm – the basic, repetitive pulse of the music or a repeated pattern in music

The rhythm element includes:

- Beat – refers to music with a steady beat or the pulse itself
- Measure/bar – how beats are grouped; the pattern or pulse of music

- Timbre – (also called “color” or “tone quality”); describes all aspects of a musical sound not relating to the pitch, loudness or length

The timbre element includes:

- Identification of sound by instrument

- Words commonly used to describe timbre include brassy, clear, focused, rounded, piercing, mellow, harsh, flat, heavy, light, dark, bright
- Melody – the result of stringing a series of notes (sounds with a particular pitch) together; a melody is the line that typically sounds most important in a piece of music

The melody element includes:

- Musical phrase -- a unit of musical meter that has a complete musical sense of its own; developed to combine melodies, periods and larger sections of music
 - Motif – a short musical idea that occurs frequently in a piece of music; small pieces of melody that reappear throughout a piece in a similar or different manner
 - Counterpoint – more than one melody occurring simultaneously
 - Theme – a longer section of melody that keeps reappearing in music; a theme typically contains several phrases
- Texture – how much activity is occurring in a piece of music at any given point; depends on the amount of rhythm, melody and combination of other elements present in the music

The texture element involves the following types of music:

- Monophonic – has only one melody and no harmony or counterpoint (one person whistling, people singing together without harmonies or instruments)
 - Homophonic – has one clear melody; its other parts provide accompaniment but are not of specific emphasis (choral music, a singer with a guitar)
 - Polyphonic music – more than one independent melody occurs simultaneously (orchestra, bands)
- Harmony – having more than one pitch sound occur simultaneously in a piece of music; harmonies are based largely on chords (groups of notes)

The harmony element includes:

- Chord progression - a series of chords played one after another
 - Harmonic rhythm - how often the chords change in a piece of music
- Additional musical terms:
 - Scales – a selection of certain notes within an octave
 - Intervals – a measure of the distance between two notes
 - Tempo – the speed of music (depends on texture and complexity of a piece); tempo markings include grave (slow and solemn); largo (slow and broad); moderato (medium); allegro (fast); presto (very fast)

- Dynamics – the loudness (amplitude) of a sound of music; dynamics in music depend on other dynamics in the piece; the typical range for an instrument or ensemble; abilities of performer(s); acoustics of location; style of musical genre
- Musical instruments:
 - Woodwind instruments – once made of wood, these instruments are tubular with holes spanning their length (oboes, clarinets, flutes, piccolos, saxophones, bagpipes, recorders)
 - Percussion instruments – instruments in which sound is produced from a tap or blow from the player (drums, bells, triangles, cymbals, pianos, xylophones, rattles)
 - String instruments – instruments that include a gut or metal wire that is bowed, plucked, struck or rubbed to create a sound (violin, viola, cello, double bass)
 - Brass instruments – wind instruments that produce tone through the vibration of the player’s lips (trumpet, French horn, trombone, tuba, cornet, saxhorn)
- Range:

Range is the set of pitches that a voice or instrument can sing or play; ranges are classified as follows:

- Vocal ranges:
 - Females: (highest to lowest) soprano; mezzo-soprano; contralto
 - Adult Males: (highest to lowest) countertenor; tenor, baritone; bass
 - Boys: (highest to lowest) treble; alto
- Instrumental ranges:
 - Lower to higher: Contra (low); Piccolo (high)
 - Power range: the part of the range where the instrument or voice is particularly strong

Grade Ten Health & Wellness

Mental Health Terminology

- There are many mental health terms that are commonly used, sometimes with little, or no connection to actual mental health problems – these “buzz words” have evolved as a part of everyday language to describe certain habits, behaviors or other situations.

Common mental health terms include:

- Acting out - the process of expressing unconscious emotional conflicts or feelings through actions rather than words
- Actualization – the realization of one’s full potential (intellectual, psychological, physical)

- Alienation – the uncomfortable feeling one gets in a setting that they view as foreign, unpredictable or unacceptable
- Amnesia – loss of memory
- Anal retentive – commonly abbreviated to “anal”, this term is used to describe a person with such attention to detail that the obsession poses annoyance to others or can be carried out to the detriment of the person
- Apathy – lack of feeling, emotion, interest or concern
- Aura – a brief sensation that warns of an impending attack or other upcoming event
- Catatonic – behavior marked by lack of movement or speech
- Cognitive – relating to thoughts or thinking
- Compulsion – repetitive, ritualistic behavior (such as hand washing, repeating words, etc.) that aims to prevent or reduce distress or prevent a dreaded event or situation
- Coping mechanisms – methods of adjusting to stress without altering one’s goals or purposes
- Defense mechanism – an automatic psychological process that protects the individual against anxiety and from awareness of internal or external stress
- Déjà vu – a sensation or illusion that one is seeing what one has seen before
- Delusion – a false belief that is maintained despite obvious proof or evidence to the contrary
- Denial – a defense mechanism where certain information is not accessed by the conscious mind; involves some impairment of reality
- Disorientation – confusion about the time of day, date or season, where one is or who one is (identity)
- Fantasy – an imagined sequence of events or mental images (e.g., daydreams) that serves to express unconscious conflicts, to gratify unconscious wishes, or to prepare for anticipated future events
- Flashback – a recurrence of a memory, feeling or experience from the past
- Hallucination – a false perception that has the compelling sense of reality
- Idealization – the process in which the person attributes exaggeratedly positive qualities to the self or others
- Instinct – an inborn drive; the primary human instincts include self-preservation and sexuality
- Introspection – self-observation; examination of one’s feelings, often as a result of psychotherapy

- Introversión – a preoccupation with oneself and accompanying reduction of interest in the outside world
 - Mental retardation – a major group of disorders of infancy, childhood, or adolescence characterized by intellectual functioning that is significantly below average (IQ of 70 or below), manifested before the age of 18 by impaired adaptive functioning (below expected performance for age in such areas as social or daily living skills, communication, and self-sufficiency)
 - Obsession – recurrent and persistent thought, impulse, or image experienced as intrusive and distressing; recognized as an excessive and unreasonable reaction but cannot be overcome by logic or reasoning
 - OCD – the acronym for obsessive compulsive disorder; sometimes used as a casual reference to certain behaviors or habits
 - Overcompensation – a conscious or unconscious process in which a real or imagined physical or psychological deficit generates exaggerated correction
 - Panic attack – a sudden onset of intense apprehension, fearfulness or terror, often associated with feelings of impending doom; these attacks are characterized by shortness of breath, palpitations, chest pain, choking and other uncomfortable sensations
 - Phobia – a persistent, irrational fear of a specific object, activity, or situation; often leads to a compelling avoidance of the feared situation
 - Rationalization – a defense mechanism, operating unconsciously, in which an individual attempts to justify or make consciously tolerable by plausible means, feelings or behavior that otherwise would be intolerable
 - Repression – a defense mechanism, operating unconsciously, that banishes unacceptable ideas, fantasies, affects, or impulses from consciousness
- The most common mental health problems are:
 - Stress – the emotional and physical strain caused by response to pressure from the outside world
 - Anxiety – a feeling of nervousness, apprehension, fear or worry
 - Depression – a mental state characterized by a negative sense of inadequacy and a lack of activity

Grade Ten Home Skills

Home & Property Management

- Waste Disposal & Recycling

- Keep a sturdy garbage can in the kitchen and empty it daily, lining it with a new trash bag each time; clean the trashcan itself on a weekly basis with a disinfecting cleaner
- Keep trash cans in bathrooms or bedrooms to collect dry trash that can be emptied weekly
- Use kitchen garbage disposals to dispose of food waste
- Do not dispose of hazardous waste (paint, anti-freeze, gasoline) with your everyday garbage – review community policies for disposing of these materials
- Participate in community recycling programs to recycle certain materials (plastic, cans, bottles, newspaper) or follow your own recycling process
 - For additional information about recycling in your area, visit: <http://www.therecyclingcenter.info/>
- Pest Control
 - It is important to take quick action if your home has a problem with pests (ants, cockroaches, dust mites, fleas, flies, mice, moths, wasps, termites) inside or outside. Failing to address pest problems can lead to infestations that can create long-term and potentially hazardous problems.
 - Keep areas clean and dry, and use household insecticides (or natural alternatives) to repel insects.
 - Monthly pest control services are also useful for pest prevention.

Food Management

- Menu Planning for Healthy Eating

Plan out weekly menus of balanced meals that contain a variety of foods from the essential food groups.

- Tips for healthy eating:

- Drink eight glasses of water per day
- Eat less than one teaspoonful of salt per day
- Include whole wheat and grains in your diet
- Reduce sugar intake
- Balance calorie intake based on how many calories you use each day
- Limit intake of fatty proteins (red meats); eating more lean protein including fish and poultry
- Eat fiber rich foods to aid digestion
- Add vitamins and minerals to your diet; if necessary, incorporate vitamin supplements

- The Food Pyramid:

The following food pyramid outlines how many servings of food you need to eat from each food group on a daily basis. The pyramid helps form the basis for a balanced diet full of the nutrients you need for good health.

- Fats, oils and sugar – eat sparingly
- Milk, yogurt, cheeses – 2-3 servings
- Meat, poultry, fish, dry beans, eggs and nuts – 2-3 servings
- Vegetables – 3-5 servings
- Fruit – 2-4 servings
- Bread, cereal, rice and pasta – 6-11 servings

Emergencies

- Emergency First Aid:

Familiarize yourself with emergency first aid techniques dealing with:

- Breathing Troubles
- Choking
- Bleeding
- Burns
- Heat stroke
- Shock
- Fractures
- Seizures
- Poisoning

Specific emergency first aid information is available at:

<http://www.mayoclinic.com/health/firstaidindex/firstaidindex>

Grade Ten Personal Finances

Paying Bills

- What are bills? Why are they important?

The term “bills” typically refers to expenses that are paid in regular intervals (monthly, quarterly, annually) for specific items or services

It is important to pay your bills on time – failing to do so can result in the termination of goods or services (housing, electricity, phone, etc.) or poor personal credit

- Methods for paying bills

There are many available options to pay your bills in a timely, effective manner:

- Pay in cash (this method may require making your payments in person)
- Pay with credit card/debit card (this method may require making your payments by phone)
- Pay with check (mailing a check to company providing service)
- Automatic withdrawals (setting up deductions that are automatically taken from your checking/savings account on a designated day)
- Online payments (online bill payer services enable you to pay your bills online – the bank either transfers the funds directly to the payee or cuts a check out of your account and issues it to payee)
 - o See following section for banking information that can help you manage your bills and make payments

Banking Basics

- Types of Banks

The majority of people use a bank to help them manage their money. In looking for a bank that meets your needs, you need to consider factors such as services, convenience and fees.

Types of banks include:

- Small banks – community banks typically excel in personal service and tend to charge lower fees and pay higher interest rates on savings accounts
- Big banks – large banking chains offer the greatest level of convenience (with a wider network of ATMs and more financial products and services)
- Online banks – these banks are run entirely on the Internet and do not operate bank buildings (they typically offer good savings options)
- Credit unions – nonprofit banks where you become a member (typically through your employer or some other affiliation); credit unions often offer better interest rates and lower fees

- Opening a Bank Account

Consider which type of bank you would like to open an account with (review their financial products and fees) and make an appointment with an account service representative

Prepare for the appointment by developing a list of questions to ask about:

- Fees for services (checking accounts, savings accounts, credit cards)
- How long checks are held upon deposit before funds are available for use
- Loans you may be interested in (home, auto, personal) and related interest rates

* Compare these options with competing banks before selecting a bank

- Checking Accounts – most checking accounts can be used by writing paper checks or using a debit card associated with the account

Consider which type of checking account you would like to open. Options include:

- No-interest checking – you earn no interest on money in the account (fees are small, if any); a good option for people who keep small amounts in their account
- Interest-paying checking – you earn a small interest rate on your balances (fees are small, if any, as long as you maintain a large balance); a good option for people who maintain a sizable balance in their account
- Express checking – all banking is done by a personal computer, phone and ATM (if you need to see a teller, you pay a fee)

To manage your checking account effectively, consider the following:

- Enter every deposit and withdrawal on your check register as you go along
- Review your online/paper statement against your check register to check for errors
- Keep track of each check that has been cashed
- Pay bills online – most online bill payer services offered by banks deduct amounts directly from your checking account, eliminating the need to write checks or wait for checks to clear
- Protect yourself from overdrawing your account (spending more money than is in your account and incurring fees) by linking your checking account to a savings, line of credit or credit card that can cover the overdraft

- Savings Accounts – there are many types of savings accounts available. Depending on your needs, choose from the following:

- Regular Savings Account – for smaller account balances; account holders accrue small amount of interest
- Money Market Account – for slightly higher account balances; pay higher rates to account holders
- Certificates of Deposit (CD) – for larger balances; commits money to the account for a period between six months and 10 years; account holders earn higher interest rates than other types of savings accounts
- Online Savings Accounts – pay highest interest rates to account holders with lowest fees; no physical bank structure

- Bank Loans

- Bank customers can apply for loans offered by the bank (personal loans, business loans, automobile loans, home loans, etc.)
- Bank loans are typically approved based on income, debt and credit history/score

Grade Ten Parenting Skills

Acceptance

- Unconditional love vs. unconditional acceptance
 - Know the definition of unconditional love: to love someone regardless of one's actions or beliefs
 - Unconditional love is possible – unconditional acceptance is not. Everyone has their own beliefs and values and will be more accepting of some areas than others.
 - Parents can *love* their children unconditionally – but parents cannot unconditionally *accept* everything their child does. Parents must make themselves aware of their own levels of acceptance and identify where they are more accepting and where they can become more accepting.

- Consistency
 - Know the definition of consistent: of a regularly occurring, dependable nature
 - By definition, parents cannot be expected to be consistent all of the time with children. The parent-child relationship involves too many emotional and evolving factors to expect a regular, dependable nature.

- Non-intervention
 - Understand the meaning of non-intervention: staying out of children's problems – letting children find their own solutions
 - Non-intervention shows parent's acceptance of child; demonstrates trust in child to solve problem independently

- Parental needs
 - Recognize and attend to your own needs as a parent; parents' needs are as critical as children's needs; parents must maintain their own identity and sense of well-being – this is crucial for healthy interactions between parent and child

- Separateness

- Parents must recognize that their children are separate individuals from themselves; parents do not “own” their children; separate identities must be respected to foster self-responsibility

Grade Ten Study Skills

Stress Management

- What is stress?
The nonspecific response of the body to any demands made upon it; stress can be positive or negative, depending on how you react to it and manage it.

Signs of academic stress:

- Feeling panic over not knowing an answer
- Feeling as though time is running out (for projects, tests, etc.)
- Worrying about how personal performance compares to peer performance
- Feeling easily distracted
- Plotting ways to escape from school, tests, etc.

Tips for effectively managing stress:

- Set priorities – simplify your life, spread out your schedule, evaluate the true urgency of situations, allow for imperfections, break tasks into smaller components
- Care for the body – exercise, rest, eat right, relax, use creative outlets
- Care for the mind – control negative thoughts, practice positive thinking
- Use social support – build a strong social network including family, friends, peers, etc.

Reading Strategies

- Effective reading comprehension skills are important for successful studying
Tips for improving reading comprehension:
 - Identify your purpose for reading; keep it in your mind as you read
 - Identify the main idea by noting repetitions of key words or phrases
 - Retrieve background information if necessary for understanding; look up unknown words or refer to less advanced resources

- Take notes on your reading
- Restate the main idea in your own words
- Read out loud if you are an auditory learner
- Formulate questions you would like the reading to answer

Grade Ten Career Skills

Personal Development

- Setting Personal Goals and Priorities:

Why is it important to establish goals and priorities?

- Goals and priorities guide personal development and help individuals find purpose and attain success.

Creating a personal development plan:

- Engage in self-assessment to consider your individual personality traits.
- Record critical goals, identify challenges and/or opportunities, and set realistic timeframes for reaching your objectives. (Personal goals commonly relate to one's attitude, career, education, family, financial and physical objectives.)
- Review plan on a regular basis, considering where your time was spent and re-evaluating the importance of each goal.
- Devote your energy to the goals that are most important to you and celebrate your achievements as they are reached.

- Organization and Time Management Skills:

Why is it important to be organized?

- Disorganization leads to wasted time – time spent looking for important items, lists, messages, etc.
- Disorganization can add stress, block creativity and prevent productivity.

Organizational/Time Management Tips:

- Use a notebook/planner: write down everything. Digital planners and computers are useful for providing electronic reminders.
- Devote a block of time early in the day (or the night before) to identify items that need to be addressed and prioritize their order of importance.

- De-clutter your surroundings – keep papers, projects, items in a proper place and establish a clear area for items that require prompt attention.
- Consider supplies or files you use the most – arrange items according to how much you use them and allow yourself the easiest access to items you use most frequently.
- Reward yourself for completing items on your to-do lists; this will help motivate you to stay organized.

- Teamwork

Why is teamwork important to our personal growth? There are many benefits to working with others to achieve goals – increased levels of creativity, increased satisfaction, increased accountability, a larger set of skills to draw from, quicker results, opportunity for feedback and support.

How to be an effective team member:

- Be responsible
- Listen without judging
- Be supportive
- Communicate effectively
- Be flexible
- Contribute

- Leadership

What is a leader?

A leader is *not* simply someone who has followers. Age or status do not automatically signify a leader.

A true leader is:

- Someone others trust and consistently look to for guidance.
- Someone who inspires loyalty in others.
- Someone who assumes the large responsibilities of leadership – courage, vision and commitment.

What is a common characteristic of leaders? Leaders continuously seek self-improvement and make adjustments in all areas of their lives in order to reach their goals.

Leadership requires focus and commitment in the following areas:

- Physical – healthy habits (diet, exercise, rest) and lifestyle choices
- Mental – intellectual growth, creativity, ongoing learning

- Social – strong, healthy relationships with others and with yourself
- Spiritual – finding meaning, significance and inspiration

Grade Ten Business Management

Management Basics

- What is management? What is a manager?

Management refers to the acts of getting people together to accomplish desired goals and objectives.

A manager is a person responsible for planning and directing the work of a group of individuals.

- What are the functions of management?
 - Planning: determining what needs to happen in the future (in the next day, week, month, year, etc.) and creating plan for action.
 - Organizing/Implementation: making maximum use of the required resources in order to carry out action plans.
 - Staffing: identifying and analyzing job requirements and wages; recruiting and hiring individuals for specific jobs; disciplining and firing.
 - Leading/Directing: identifying what needs to be done in a project/situation and assigning people to complete specific tasks.
 - Controlling/Monitoring: checking progress against plans.
- Traits of successful managers:
 - Knowledge of key business/organizational practices
 - Leadership skills
 - Decision-making skills
 - Problem-solving skills
 - Multi-tasking skills
 - Time-management skills
 - Ability to manage people
- Pros & Cons of being a manager:

- Pros: higher pay, higher authority/status, more desirable working conditions, satisfaction and pride in project ownership, ability to mentor/train others
- Cons: difficult decisions, increased liabilities and/or restrictions, distant relationships with co-workers, less immediate feedback on performance, responsibility for end results

- Benefits to becoming a manager:

Money:

- Managers typically make more money than the workers they manage, without having to possess the specific, technical skills required to perform the job.

Example: An air conditioning contract manager receives a customer project with a payment of \$10,000. The contract manager buys \$500 worth of materials and hires a crew of five people, paying each \$100 to complete the work. The contract manager keeps the rest of the payment (90 percent of the cost.)

Time:

- Managers can delegate assignments and responsibilities including training, travel, monitoring, reporting, etc.

Example: A construction manager who is managing a job site may not even need a license; he/she can hire an individual who has a license to supervise the site. The construction manager could also hire a consultant to visit the job site to oversee operations and monitor progress.

- Cooperative management: a management style wherein all individuals in an organization/team share knowledge, power and responsibility.

How to achieve cooperative management:

- Keep the best interests of organization and employees in mind
- Build trust and develop mutual support within a team
- Engage appropriate skills and resources to reaching end goals
- Encourage free communication and open information throughout team
- Invite feedback from all team members and explore new ideas

Careers by Field

The following sections identify and explore major career areas and list individual occupations within each field. The occupations within each field can vary a great deal in terms of training requirements, salary, job satisfaction, etc.

It is important to research individual occupations to learn specific information on salary, job locations, career forecasts and educational requirements. The U.S. Bureau of Labor Statistics provides accurate, updated information on occupations: <http://www.bls.gov/>

- **Medical & Healthcare**

The medical/healthcare industry is one of the largest providers of jobs in America. Jobs in the industry are with hospitals, nursing and residential care facilities and the offices of physicians, dentists and other health practitioners. The industry is expected to grow at a significant rate in the next decade.

Occupations in the field:

- Doctor
- Nurse
- Nurse practitioner
- Physicians assistant
- Medical assistant
- Lab technician
- Medical transcriptionist
- Medical office assistant
- Medical billing specialist
- Dentist
- Dental hygienist
- Veterinarian
- Veterinary assistant
- Pharmacist
- Pharmacy assistant
- Nutritionist
- Physical therapist
- Occupational therapist
- Sports medicine

- **Legal & Social**

The legal/social industry involves occupations dealing with the law or social functions. People in the field are employed in several different arenas including private practice, government and corporate entities. The industry has experienced some downturn due to a weakened economy; however, portions of the legal and social field are in growing demand including those dealing with banking, finance, public interests and corporate liabilities.

Occupations in the field:

- Attorney
- Paralegal
- Legal assistant
- Social worker

- Psychologist
- Court reporter
- Police officer
- Private investigator
- Criminal justice
- Forensics
- F.B.I.

- **Communications & The Arts**

The communications industry employs people in functions involving the media; jobs are often within a company's communications department or with media outlets including newspapers, magazines, broadcast stations and networks. The industry is highly competitive and workers who have expertise in highly technical areas often have the advantage.

The arts industry is comprised of many self-employed workers. However, there is an ongoing need for talented people with creative ability at many companies; individuals can find jobs in design firms, corporations and publishing companies.

Occupations in the field:

- Authors, writers, editors
- Broadcast and sound engineering technicians
- Interpreters and translators
- News announcers, analysts, reporters and correspondents
- Photographers
- Public relations specialists
- Technical writers
- Television, video and motion picture operators and editors
- Artists
- Commercial and industrial designers
- Fashion designers
- Graphic designers
- Interior designers

- **Education**

The education field varies depending on location, grade levels, subjects taught and other factors. Educators are often employed by schools, museums, libraries or other types of enrichment institutions. Public education is largely dependent on state and federal legislation that affects the quality and scope of educational offerings.

Occupations in the field:

- Teacher, teacher's assistant
- Instructional coordinator
- Librarians, library technician, library assistant
- School administration, guidance counselor
- School secretary
- Special education
- Archivist, curator, museum technician

- **Computer Science/Technology**

The computer science industry is comprised of workers who design, create and work with technology. People in this field are in increasing demand as individuals and organizations continue to increase their use of complex technologies. These workers are employed in many areas including systems design and software publishing. They also work within companies supporting technical systems and product development.

Occupations in the field:

- Computer scientist
- Computer network, systems and database administrator
- Computer software engineers and computer programmer
- Computer support specialist
- Computer systems analyst
- Operations research analyst
- Graphic designer

• **Mathematics & Science**

The mathematics industry is made up of workers who practice forms of theoretical or applied mathematics. These individuals use math to solve problems and determine effective ways to allocate resources. Workers are often employed by schools and universities, engineering firms, or large corporate or federal agencies.

The sciences industry is made up of people who use science to observe, measure, interpret and develop theories about various aspects of the world. These people are often employed by companies or agencies with research and development needs – workers help invent and improve products and processes.

Occupations in the field:

- Biologist
- Chemist
- Physicist
- Astronomer
- Geologist
- Botanist
- Zoologist
- Biochemist
- Mathematician
- Actuary
- Statistician

• **Business & Financial**

The business/financial industry is comprised of individuals who strive to meet specific revenue and productivity goals. Workers are employed by (or run their own) businesses including public-sector organizations, nonprofit institutions and private corporations. Business is highly competitive and is affected by activity within each particular sector (including mergers, growth, etc.)

Occupations in the field:

- Manager
- Human resources professional
- Project manager
- Marketing specialist

- Advertising executive
- Accountant, auditor, appraiser, tax examiners
- Bookkeeper
- Financial consultant, personal financial planners
- Investment banker
- Sales professional
- Insurance agent, underwriter
- Loan officers, budget analysts
- Meeting and convention planners

Grade Ten Entrepreneurship

Can I Be an Entrepreneur?

Everyone has the ability to become an entrepreneur – to brainstorm ideas and create a business. However, there are major dimensions of one's personality that must be developed in order to be an effective entrepreneur.

The Entrepreneurial Personality – the following are critical aspects of an entrepreneur's personality:

1. Dreaming – this is the part of the personality that enables an entrepreneur to develop an idea (a dream) and generate passion for it
2. Thinking – this is the part of the personality that enables an entrepreneur to turn their dream into a vision by assigning a strategy and developing a business model
3. Storytelling/Performing – this is the part of the personality that enables an entrepreneur to put a voice to their dream and excite others about it
4. Leading – this is the part of the personality that enables an entrepreneur to assume responsibility for moving their dream forward – it combines the three other aspects and takes accountability for making the dream a reality

The "Leading" aspect is responsible for many essential functions of entrepreneurship including concentration, organization, innovation and communication.

Is entrepreneurship right for you?

The following quiz helps identify aspects of entrepreneurial personality:

http://www.forbes.com/2005/11/15/entrepreneur-personality-quiz_cx_bn_1116quiz.html

Eleventh Grade

Free World U

Grade Eleven Language Arts

Vocabulary

- Etymology
Significant terms used in political science and history
- Greek, Latin, and Anglo-Saxon Roots
Applying to scientific and mathematical terminology
- Greek, Latin, and Anglo-Saxon Prefixes
Applying to scientific and mathematical terminology
- Greek, Latin, and Anglo-Saxon Suffixes
Applying to scientific and mathematical terminology
- Analogies

Reading Informational Materials

- Rhetorical Devices
Students will review rhetorical devices then read and analyze public documents such as policy statements and speeches
- Verifying Meaning
Students will use other texts to verify facts in expository writings
- Analyzing Meaning
Students will analyze how textual structures, word choice, syntax, and organization contribute to clarity of meaning, interpretation, and expression of philosophical assumptions and beliefs
- Critiquing Works on the Same Topic
Students will critique the arguments and rhetorical appeals of public documents as well as the clarity and consistency of political assumptions
- Written Historical Investigation Report/Oral Presentation

Writing Strategies

- Elements of Discourse
How to use when writing narrative, expository, persuasive, and descriptive passages
- Using Point of View, Characterization, and Style
- Structure and Support of Ideas
- Enhancing Meaning
Students learn how the use of rhetorical devices, visual aids, and the issuance of a call for action can enhance the meaning of their writings
- Establishing Tone
Students learn how to use language to establish a specific tone in their writings
- Using Questions and Research Strategies to Develop Presentations
This section will cover various strategies for gathering information

- Organizing and Recording Information
Students will learn strategies for organizing and recording the information they have gathered
- Evaluation and Revision
Students will learn to make revisions to writings consistent with purpose, audience, and genre as well as using proper grammar, diction, and paragraph and sentence structure
- Written Autobiographical or Biographical Narrative
- Resume and Cover Letter

Listening and Speaking Strategies

- Media and Message
Students will learn about strategies used to inform, persuade, entertain, and transmit culture and analyze the effectiveness of a presented excerpt
- Media and Democracy
Students will learn about the media's influence on political process
- Visual Media
Students will learn to interpret and evaluate how visual image makers communicate their message
- Using Literary Devices and Language in Oral Communication
The use of language and devices such as rhetorical questions, figurative language, and others
- Using Logical Arguments
Inductive and deductive reasoning as well as syllogisms and analogies
- Presentation Techniques
Students will learn rehearsal techniques, use of visual and audio effects, and other strategies to enhance performance
- Analysis of Oral and Media Communications
Students will learn to critique diction and syntax and identify logical fallacies
- Four Types of Persuasive Speech
Propositions of fact, value, problem, or policy

American Literature

- American Literary History from the Colonial Period to the Present
A general overview of the major periods of American literature
- Analysis of American Literature
Students will compare and contrast the characteristics of the major periods

American Short Story #1: "Young Goodman Brown," by Nathaniel Hawthorne

- Hawthorne and the Puritans
How the story and its theme are shaped by the culture and time during which it was written

- Use of Archetypes
Define and explore archetypes and their use in “Young Goodman Brown” along with other examples from film, political speeches, and religious writings

American Short Story #2: “To Build a Fire,” by Jack London

- Author’s Style
Define the terms and discuss their use in the chosen short story
- Oral Response:
The student will deliver an oral response to “To Build a Fire” and in doing so demonstrate a comprehensive understanding of the significant ideas of the story; analyze the imagery, language, universal themes, and unique aspects of the text through the use of rhetorical; support important ideas and viewpoints through accurate and detailed references to the text or to other works; demonstrate an awareness of the author’s use of stylistic devices and an appreciation of the effects created; and identify and assess the impact of perceived ambiguities, nuances, and complexities within the text

American Play: *The Piano Lesson* by August Wilson

- Theme
Define and discuss theme as a view or comment on life and its use in the chosen play
- Multimedia Presentation
The student will combine text, images, and sound by incorporating information from a wide range of media, including films, newspapers, magazines, CD-ROMs, online information, television, videos, and electronic media-generated images; select an appropriate medium for each element of the presentation; use the selected media skillfully, editing appropriately and monitoring for quality; test the audience’s response and revise the presentation accordingly.

American Novel: *The Age of Innocence* by Edith Wharton

- Contextual Analysis
Evaluate the chosen novel based on the philosophical, political, religious, ethical, and social influences of the time in which it was written
- Philosophical Analysis
Analyze the philosophical arguments in the chosen novel

World Literature

- World Literary History
A general overview of the major periods of world literature
- Analysis of World Literature
Compare and contrast the characteristics of the major periods

World Short Story #1: “The Metamorphosis,” by Franz Kafka

- Subgenres
Define and present examples of subgenres and their use in the chosen short story
- Reflective Composition

The student will explore the significance of personal experiences, events, conditions, or concerns by using rhetorical strategies; draw comparisons between specific incidents and broader themes that illustrate the writer's important beliefs or generalizations about life; and maintain a balance in describing individual incidents and relate those incidents to more general and abstract ideas

World Short Story #2: "The Necklace," by Guy de Maupassant

- Author's Style
Discuss the elements that define an author's style and their use in the chosen short story
- Written response
The student will respond to the text by demonstrating a comprehensive understanding of the significant ideas in works or passages; analyzing the use of imagery, language, universal themes, and unique aspects of the text; supporting important ideas and viewpoints through accurate and detailed references to the text and to other works; demonstrating an understanding of the author's use of stylistic devices and an appreciation of the effects created; and identifying and assessing the impact of perceived ambiguities, nuances, and complexities within the text.

World Play: Antigone, by Sophocles

- Theme
Define and discuss theme as a view or comment on life and its use in the chosen play
- Recitation
The student will recite a monologue from the text with attention to performance details to achieve clarity, force, and aesthetic effect and to demonstrate an understanding of the meaning.

World Novel: Things Fall Apart, by Chinua Achebe

- Use of Archetypes
Extend the discussion of archetypes to analysis of a contrasting piece of literature
- Contextual Analysis
Evaluate the chosen novel based on the philosophical, political, religious, ethical, and social influences of the time in which it was written

Poetry

- Use of Literary Devices to Express Emotion
Including imagery, personification, figures of speech, and sound
- Reflective Presentation
Deliver an oral reflective presentation based on a personal experience inspired by the reading of poetry

Precalculus

Trigonometry

- Angles Measured in Radians or Degrees
Students understand the notion of angle and how to measure it, in both degrees and radians. They can convert between degrees and radians

- **Introducing Sine and Cosine**
Students know the definition of sine and cosine as y- and x- coordinates of points on the unit circle and are familiar with the graphs of the sine and cosine functions
- **Pythagorean Identity**
Students know the identity $\cos^2(x) + \sin^2(x) = 1$; students can prove that this identity is equivalent to the Pythagorean Theorem (i.e., students can prove this identity by using the Pythagorean Theorem and, conversely, they can prove the Pythagorean Theorem as a consequence of this identity)
- **Proving Other Trigonometric Identities**
Students prove other trigonometric identities and simplify others by using the identity $\cos^2(x) + \sin^2(x) = 1$. For example, students use this identity to prove that $\sec^2(x) = \tan^2(x) + 1$
- **Graphing Trigonometric Functions**
Students graph functions of the form $f(t) = A \sin(Bt + C)$ or $f(t) = A \cos(Bt + C)$ and interpret A, B, and C in terms of amplitude, frequency, period, and phase shift
- **Tangent and Cotangent Functions**
Students know the definitions of the tangent and cotangent functions and can graph them
- **Secant and Cosecant Functions**
Students know the definitions of the secant and cosecant functions and can graph them
- **Tangent and Slope**
Students know that the tangent of the angle that a line makes with the x- axis is equal to the slope of the line
- **Inverse Trigonometric Functions**
Students know the definitions of the inverse trigonometric functions and can graph the functions
- **Computing Functions by Hand**
Students compute, by hand, the values of the trigonometric functions and the inverse trigonometric functions at various standard points
- **Addition Formulas for Sines & Cosines**
Students demonstrate an understanding of the addition formulas for sines and cosines and their proofs and can use those formulas to prove and/ or simplify other trigonometric identities
- **Half-Angle and Double-Angle Formulas**
Students demonstrate an understanding of half-angle and double-angle formulas for sines and cosines and can use those formulas to prove and/ or simplify other trigonometric identities
- **Right Triangle Trigonometry**
Students use trigonometry to determine unknown sides or angles in right triangles
- **Law of Sines & Law of Cosines**
Students know the law of sines and the law of cosines and apply those laws to solve problems
- **Determining the Area of a Triangle**
Students determine the area of a triangle, given one angle and the two adjacent sides
- **Polar Coordinates**

Students are familiar with polar coordinates. In particular, they can determine polar coordinates of a point given in rectangular coordinates and vice versa

- **Converting Points**
Students represent equations given in rectangular coordinates in terms of polar coordinates
- **Complex Numbers**
Students are familiar with complex numbers. They can represent a complex number in polar form and know how to multiply complex numbers in their polar form
- **DeMoivre's Theorem**
Students know DeMoivre's Theorem and can give n th roots of a complex number given in polar form
- **Applying Trigonometry**
Students are adept at using trigonometry in a variety of applications and word problems

Mathematical Analysis

- **Application of Polar Coordinates and Vectors**
Students are familiar with, and can apply, polar coordinates and vectors in the plane. In particular, they can translate between polar and rectangular coordinates and can interpret polar coordinates and vectors graphically
- **Arithmetic of Complex Numbers**
Students are adept at the arithmetic of complex numbers. They can use the trigonometric form of complex numbers and understand that a function of a complex variable can be viewed as a function of two real variables. They know the proof of DeMoivre's theorem
- **Proofs by Mathematical Induction**
Students can give proofs of various formulas by using the technique of mathematical induction
- **Fundamental Theorem of Algebra**
Students know the statement of, and can apply, the fundamental theorem of algebra
- **Conic Sections**
Students are familiar with conic sections, both analytically and geometrically
- **Manipulating Quadratic Equations**
Students can take a quadratic equation in two variables; put it in standard form by completing the square and using rotations and translations, if necessary; determine what type of conic section the equation represents; and determine its geometric components (foci, asymptotes, and so forth)
- **Quadratic Equations from Conic Sections**
Take a geometric description of a conic section - for example, the locus of points whose sum of its distances from $(1, 0)$ and $(-1, 0)$ is 6 - and derive a quadratic equation representing it
- **Roots and Poles of a Rational Function**
Students find the roots and poles of a rational function and can graph the function and locate its asymptotes
- **Parametric Definitions**
Students demonstrate an understanding of functions and equations defined parametrically and can graph them

- Limits of Sequences and Functions
Students are familiar with the notion of the limit of a sequence and the limit of a function as the independent variable approaches a number or infinity. They determine whether certain sequences converge or diverge

Linear Algebra

- Gauss-Jordan Elimination
Students solve linear equations in any number of variables by using Gauss-Jordan elimination
- Coefficient Matrices
Students interpret linear systems as coefficient matrices and the Gauss-Jordan method as row operations on the coefficient matrix
- Row Echelon Form
Students reduce rectangular matrices to row echelon form
- Addition on Matrices and Vectors
Students perform addition on matrices and vectors
- Matrix Multiplication
Students perform matrix multiplication and multiply vectors by matrices and by scalars
- Forms of Linear Systems
Students demonstrate an understanding that linear systems are inconsistent (have no solutions), have exactly one solution, or have infinitely many solutions
- Geometric Interpretation of Vectors
Students demonstrate an understanding of the geometric interpretation of vectors and vector addition (by means of parallelograms) in the plane and in three-dimensional space
- Geometric Interpretation of Solution Sets
Students interpret geometrically the solution sets of systems of equations. For example, the solution set of a single linear equation in two variables is interpreted as a line in the plane, and the solution set of a two-by-two system is interpreted as the intersection of a pair of lines in the plane
- Inverse to a Square Matrix
Students demonstrate an understanding of the notion of the inverse to a square matrix and apply that concept to solve systems of linear equations
- Determinants of Matrices
Students compute the determinants of 2×2 and 3×3 matrices and are familiar with their geometric interpretations as the area and volume of the parallelepipeds spanned by the images under the matrices of the standard basis vectors in two-dimensional and three-dimensional spaces
- Inverse Square Matrices
Students know that a square matrix is invertible if, and only if, its determinant is nonzero. They can compute the inverse to 2×2 and 3×3 matrices using row reduction methods or Cramer's rule
- Dot Products
Students compute the scalar (dot) product of two vectors in n -dimensional space and know that perpendicular vectors have zero dot product

Chemistry

Atomic and Molecular Structure

- Review of Matter
Atoms, elements, compounds; review introductory terminology; review atomic theory
- Atomic Structure
Define nucleus, protons, neutrons, electrons, orbitals
- Atomic Number and Mass
How to relate the position of an element in the periodic table to its atomic number and atomic mass; know the nucleus of the atom is much smaller than the atom yet contains most of its mass
- Areas of the Periodic Table
Students know how to use the periodic table to identify metals, semimetals, nonmetals, and halogens; use the periodic table to identify alkali metals, alkaline earth metals, and transition metals.
- Information from the Periodic Table
Use the periodic table to identify trends in ionization energy, electronegativity, and the relative sizes of ions and atoms
- Electrons Available for Bonding
Students know how to use the periodic table to determine the number of electrons available for bonding

Chemical Bonds

- Atomic Bonds
Students know atoms combine to form molecules by sharing electrons to form covalent or metallic bonds or by exchanging electrons to form ionic bonds
- Covalent Bonds
Students know chemical bonds between atoms in molecules such as H_2 , CH_4 , NH_3 , H_2O , C_2H_6 , N_2 , Cl_2 , and many large biological molecules are covalent
- Salt Crystals
Students know salt crystals, such as $NaCl$, are repeating patterns of positive and negative ions held together by electrostatic attraction
- Bonds in Liquids
Students know the atoms and molecules in liquids move in a random pattern relative to one another because the intermolecular forces are too weak to hold the atoms or molecules in a solid form
- Lewis Dot Structures
Students know how to draw Lewis dot structures

Conservation of Matter

- Writing Balanced Equations
Students know how to describe chemical reactions by writing balanced equations

- Moles
Students know the quantity one mole is set by defining one mole of carbon 12 atoms to have a mass of exactly 12 grams; one mole equals 6.02×10^{23} particles (atoms or molecules)
- Molar Mass of Molecules
Determine the molar mass of a molecule from its chemical formula and a table of atomic masses; convert the mass of a molecular substance to moles, number of particles, or volume of gas at standard temperature and pressure
- Calculating Masses
Students know how to calculate the masses of reactants and products in a chemical reaction from the mass of one of the reactants or products and the relevant atomic masses

Gases and Their Properties

- The Random Motion of Molecules
Students know the random motion of molecules and their collisions with a surface create the observable pressure on that surface; know the random motion of molecules explains the diffusion of gases
- Gas Laws
Students know how to apply the gas laws to relations between the pressure, temperature, and volume of any amount of an ideal gas or any mixture of ideal gases
- Temperature
Know the values and meanings of standard temperature and pressure (STP); convert between the Celsius and Kelvin temperature scales; know there is no temperature lower than 0 Kelvin

Acids and Bases

- Observable Properties
Students know the observable properties of acids, bases, and salt solutions
- Acids and Hydrogen
Students know acids are hydrogen-ion-donating and bases are hydrogen-ion-accepting substances
- Dissociation
Students know strong acids and bases fully dissociate and weak acids and bases partially dissociate
- pH Scale
Students know how to use the pH scale to characterize acid and base solutions

Solutions

- Definitions
Know the definitions of solute and solvent; describe the dissolving process at the molecular level by using the concept of random molecular motion;
- The Dissolving Process
Students know temperature, pressure, and surface area affect the dissolving process
- Calculating Solutions

Students know how to calculate the concentration of a solute in terms of grams per liter, molarity, parts per million, and percent composition

Chemical Thermodynamics

- Thermal Energy
Describe temperature and heat flow in terms of the motion of molecules (or atoms); chemical processes can either release (exothermic) or absorb (endothermic) thermal energy
- Release of Energy
Students know energy is released when a material condenses or freezes and is absorbed when a material evaporates or melts
- Solving Thermal Problems
Students know how to solve problems involving heat flow and temperature changes, using known values of specific heat and latent heat of phase change

Reaction Rates

- Rate of Reaction
Students know the rate of reaction is the decrease in concentration of reactants or the increase in concentration of products with time
- Factors Affecting Reaction Rates
Students know how reaction rates depend on such factors as concentration, temperature, and pressure
- Reaction Rate and Catalysts
Students know the role a catalyst plays in increasing the reaction rate

Chemical Equilibrium

- Le Chatelier's Principle
Students know how to use Le Chatelier's principle to predict the effect of changes in concentration, temperature, and pressure
- Chemical Equilibrium
Students know equilibrium is established when forward and reverse reaction rates are equal

Organic Chemistry and Biochemistry

- Polymers
Students know large molecules (polymers), such as proteins, nucleic acids, and starch, are formed by repetitive combinations of simple subunits
- Bonding Characteristics of Carbon
Students know the bonding characteristics of carbon that result in the formation of a large variety of structures ranging from simple hydrocarbons to complex polymers and biological molecules
- Amino Acids
Students know amino acids are the building blocks of proteins

Nuclear Processes

- Nuclear Forces
Students know protons and neutrons in the nucleus are held together by nuclear forces that overcome the electromagnetic repulsion between the protons
- Energy Release
Energy release per gram of material is much larger in nuclear fusion or fission reactions than in chemical reactions; change in mass (calculated by $E = mc^2$) is small but significant in nuclear reactions
- Radioactive Isotopes
Students know some naturally occurring isotopes of elements are radioactive, as are isotopes formed in nuclear reactions
- Radioactive Decay
Students know the three most common forms of radioactive decay (alpha, beta, and gamma) and know how the nucleus changes in each type of decay
- Types of Radiation
Students know alpha, beta, and gamma radiation produce different amounts and kinds of damage in matter and have different penetrations

U.S. History and Geography

The Founding of the Nation

- Rise of Democratic Ideas
Enlightenment and rise of democratic ideas as the context in which the nation was founded
- Ideas and Debates
Ideological origins of the American Revolution; Founding Fathers' philosophy of divinely bestowed unalienable natural rights; debates on the drafting and ratification of the Constitution; addition of the Bill of Rights
- History of the Constitution
History of the Constitution after 1787; federal versus state authority; growing democratization; attempts to realize the philosophy of government described in the Declaration of Independence
- Civil War, Reconstruction and the Industrial Revolution
Effects of the Civil War and Reconstruction and of the industrial revolution; demographic shifts; emergence in the late nineteenth century of the United States as a world power

Industrialization, Urban Migration and Immigration

- Effects of Industrialization
*Effects of industrialization on living and working conditions; portrayal of working conditions and food safety in Upton Sinclair's *The Jungle**
- Growth of Cities
The changing landscape; growth of cities linked by industry and trade; development of cities divided according to race, ethnicity, and class
- Americanization
Effect of the Americanization movement

- Political Machines
Effect of urban political machines; responses to them by immigrants and middle-class reformers
- Monopolies
Corporate mergers that produced trusts and cartels; economic and political policies of industrial leaders
- Economic Development
Economic development of the United States; its emergence as a major industrial power; its gains from trade; advantages of its physical geography
- Social Darwinism
Similarities and differences between the ideologies of Social Darwinism and Social Gospel; biographies of William Graham Sumner, Billy Sunday, Dwight L. Moody
- Populism
Effect of political programs and activities of Populists
- Progressivism
Effect of political programs and activities of the Progressives; federal regulation of railroad transport, Children's Bureau, the Sixteenth Amendment, Theodore Roosevelt, Hiram Johnson

Role and Impact of Religion in America

- Contributions of Religion
Contributions of various religious groups to American civic principles and social reform movements - civil and human rights, individual responsibility and the work ethic, antimonarchy and self-rule, worker protection, family-centered communities
- Great Religious Revivals
The great religious revivals; leaders involved in them; First Great Awakening; Second Great Awakening; Civil War revivals; Social Gospel Movement; rise of Christian liberal theology in the nineteenth century; impact of the Second Vatican Council; rise of Christian fundamentalism in current times
- Religious Intolerance
Incidences of religious intolerance in the United States - persecution of Mormons, anti-Catholic sentiment, anti-Semitism
- Religious Pluralism
Expanding religious pluralism in the United States and California that resulted from large-scale immigration in the twentieth century
- Religion and the Constitution
Principles of religious liberty found in the Establishment and Free Exercise clauses of the First Amendment; debate on the issue of separation of church and state

The United States as a World Power

- Open Door Policy
Purpose and effects of the Open Door policy
- Spanish-American War
Spanish-American War; U.S. expansion in the South Pacific
- Panama Canal

America's role in the Panama Revolution; building of the Panama Canal

- Foreign Policy
Theodore Roosevelt's Big Stick diplomacy; William Taft's Dollar Diplomacy; Woodrow Wilson's Moral Diplomacy; relevant speeches
- World War I
Political, economic, and social ramifications of World War I on the home front
- United States as a World Power
Declining role of Great Britain; expanding role of the United States in world affairs after World War I

The 1920's

- Presidents
Policies of Presidents Warren Harding, Calvin Coolidge, and Herbert Hoover
- Attacks on Civil Liberties
International and domestic events, interests, and philosophies that prompted attacks on civil liberties; Palmer Raids; Marcus Garvey's "back-to-Africa" movement; Ku Klux Klan; immigration quotas; responses of organizations such as the American Civil Liberties Union, the National Association for the Advancement of Colored People, and the Anti-Defamation League to those attacks
- Prohibition
Passage of the Eighteenth Amendment to the Constitution; the Volstead Act
- Women's Suffrage
Passage of the Nineteenth Amendment; changing role of women in society
- Harlem Renaissance
Harlem Renaissance; new trends in literature, music, and art; the work of writers - Zora Neale Hurston, Langston Hughes
- Popular Culture
Growth and effects of radio and movies; their role in the worldwide diffusion of popular culture
- Prosperity
Rise of mass production techniques; the growth of cities; impact of new technologies - automobile, electricity; the resulting prosperity and effect on the American landscape

The Great Depression and the Role of the Federal Government

- Monetary Issues
Monetary issues of the late nineteenth and early twentieth centuries that gave rise to the establishment of the Federal Reserve; weaknesses in key sectors of the economy in the late 1920s
- Causes of the Great Depression
Principal causes of the Great Depression; steps taken by the Federal Reserve, Congress, and Presidents Herbert Hoover and Franklin Delano Roosevelt to combat the economic crisis
- Human Toll

Human toll of the Depression; natural disasters; unwise agricultural practices; their effects on the depopulation of rural regions; political movements of the left and right; Dust Bowl refugees and their social and economic impacts in California

- **New Deal**
Effects of and the controversies arising from New Deal economic policies; expanded role of the federal government in society and the economy since the 1930s; Works Progress Administration; Social Security; National Labor Relations Board; farm programs; regional development policies; energy development projects such as the Tennessee Valley Authority, California Central Valley Project, and Bonneville Dam
- **Labor Movement**
Advances and retreats of organized labor; creation of the American Federation of Labor and the Congress of Industrial Organizations; current issues of a postindustrial, multinational economy; United Farm Workers in California

America in World War II

- **Origins**
Origins of American involvement in the war; events that precipitated the attack on Pearl Harbor
- **Wartime Strategy**
U.S. and Allied wartime strategy; major battles of Midway, Normandy, Iwo Jima, Okinawa, and the Battle of the Bulge
- **American Soldiers**
Roles and sacrifices of individual American soldiers; unique contributions of the special fighting forces - Tuskegee Airmen, 442nd Regimental Combat team, Navajo Code Talkers
- **Foreign Policy**
Roosevelt's foreign policy during World War II; Four Freedoms speech

- The Home Front
Constitutional issues; impact of events on the U.S. home front; internment of Japanese Americans - Fred Korematsu v. United States of America; restrictions on German and Italian resident aliens; response of the administration to Hitler's atrocities against Jews and other groups; roles of women in military production; roles and growing political demands of African Americans
- Industry
Major developments in aviation, weaponry, communication, and medicine; war's impact on the location of American industry and use of resources
- Atomic Bomb
Decision to drop atomic bombs; consequences of the decision; Hiroshima and Nagasaki
- Rebuilding Europe
Effect of massive aid given to Western Europe under the Marshall Plan to rebuild itself after the war; importance of a rebuilt Europe to the U.S. economy

Post-World War II America

- Growth of Service Sector
Growth of service sector, white collar, and professional sector jobs in business and government
- Immigration
Significance of Mexican immigration; its relationship to the agricultural economy, especially in California
- Labor Policy
Truman's labor policy; congressional reaction to it
- Fiscal Policy
New federal government spending on defense, welfare, interest on the national debt; federal and state spending on education; California Master Plan
- Presidency
Increased powers of the presidency in response to the Great Depression, World War II, and the Cold War
- Environment
Diverse environmental regions of North America; their relationship to local economies; origins and prospects of environmental problems in those regions
- Technological Developments
Effects on society and the economy of technological developments since 1945; the computer revolution; changes in communication; advances in medicine; improvements in agricultural technology
- Popular Culture
Forms of popular culture; their origins and geographic diffusion; jazz and other forms of popular music; professional sports; architectural and artistic styles

U.S. Foreign Policy Since World War II

- International Organizations
Establishment of the United Nations and International Declaration of Human Rights; International Monetary Fund; World Bank; General Agreement on Tariffs and Trade (GATT); their importance in shaping modern Europe and maintaining peace and international order
- Military Alliances
Role of military alliances; NATO; SEATO; deterring communist aggression; maintaining security during the Cold War
- Cold War
Origins and geopolitical consequences, foreign and domestic, of the Cold War and containment policy; era of McCarthyism, instances of domestic Communism (Alger Hiss) and blacklisting; Truman Doctrine; Berlin Blockade; Korean War; Bay of Pigs invasion; Cuban Missile Crisis; Atomic testing in the American West; "mutual assured destruction" doctrine; disarmament policies; Vietnam War; Latin American policy
- Domestic Considerations
Effects of foreign policy on domestic policies and vice versa; protests during the war in Vietnam; "nuclear freeze" movement
- Winning the Cold War
Role of the Reagan administration and other factors in the victory of the West in the Cold War
- Middle East Policy
U.S. Middle East policy; its strategic, political, and economic interests; the Gulf War
- United States and Mexico
Relations between the United States and Mexico in the twentieth century; key economic, political, immigration, and environmental issues

Federal Civil Rights and Voting Rights

- Effect of World War II
How demands of African Americans helped produce a stimulus for civil rights; President Roosevelt's ban on racial discrimination in defense industries in 1941; how African Americans' service in World War II produced a stimulus for President Truman's decision to end segregation in the armed forces in 1948
- Milestones in Civil Rights
Key events, policies, and court cases in the evolution of civil rights; Dred Scott v. Sandford; Plessy v. Ferguson; Brown v. Board of Education; Regents of the University of California v. Bakke; California Proposition 209
- Higher Education
Collaboration on legal strategy between African American and white civil rights lawyers to end racial segregation in higher education
- Important Leaders
Roles of civil rights advocates; A. Philip Randolph; Martin Luther King, Jr.; Malcolm X; Thurgood Marshall; James Farmer; Rosa Parks; significance of Martin Luther King, Jr.'s "Letter from Birmingham Jail" and "I Have a Dream" speech

- Spread of Civil Rights
Diffusion of the civil rights movement of African Americans from the churches of the rural South and the urban North; resistance to racial desegregation in Little Rock and Birmingham; how the advances influenced the agendas, strategies, and effectiveness of the quests of American Indians, Asian Americans, and Hispanic Americans for civil rights and equal opportunities
- Legislation
Passage and effects of civil rights and voting rights legislation; 1964 Civil Rights Act; Voting Rights Act of 1965; Twenty-Fourth Amendment; equality of access to education and to the political process
- Women's Movement
History of the women's rights movement; Elizabeth Stanton; Susan Anthony; passage of the Nineteenth Amendment; the movement launched in the 1960s; differing perspectives on the roles of women

Social and Domestic Issues in Contemporary America

- Immigration
Reasons for the nation's changing immigration policy; how the Immigration Act of 1965 and successor acts have transformed American society
- Important Speeches
Significant domestic policy speeches of Truman, Eisenhower, Kennedy, Johnson, Nixon, Carter, Reagan, Bush, and Clinton - with regard to education, civil rights, economic policy, environmental policy
- Roles of Women
Changing roles of women in society; entry of more women into the labor force; changing family structure
- Watergate
The constitutional crisis originating from the Watergate scandal
- Environment
Impact of, need for, and controversies associated with environmental conservation, expansion of the national park system, and development of environmental protection laws; the interaction between environmental protection advocates and property rights advocates
- Poverty
Persistence of poverty; how different analyses of the issue of poverty influence welfare reform, health insurance reform, and other social policies
- Social Issues
How the federal, state, and local governments have responded to demographic and social changes such as population shifts to the suburbs, racial concentrations in the cities, Frostbelt-to-Sunbelt migration, international migration, decline of family farms, increases in out-of-wedlock births, and drug abuse

Grade Eleven Health

Strategies for Managing Illnesses

- Contagious Illnesses
- Chronic Illnesses

- Degenerative Illnesses

Altering Health and Safety Problems

- By Technology
- From the Media
- With Medicine

Correction of Health Threatening Environmental Problems

- Correction by Individuals
- Correction by Communities
- Correction by States

Healthy Strategies

- Asserting Yourself
- Preventing Conflict
- Resolving Differences

Marriage

- Recognition
- Rights and Obligation
- Cohabitation
- Types

Denial

- As a Defense Mechanism
- Denial of Fact
- Denial of Responsibility
- Denial of Impact
- Denial of Awareness
- Denial of Cycle

Family as the Basic Unit of Society

- Definition
- Kinds of Families

- Values
- Roles & Responsibilities in Meeting Needs throughout the Life Cycle
- Impact of Family-Related Issues on Society

Grade Eleven Spanish II

Possessives (new topic area)

- Possessive constructions
- Possessive adjectives
- Possessive pronouns
- “Ser” and possession
- Family titles, relationships and diminutives

Likes and Dislikes (new topic area)

- Things you like to do
- How to say “No”
- Introduction to “Gustar” – “To like”

Questions (new topic area)

- Intonation
- Interrogatives
- Subject-Verb switch
- Interjections
- Better and best

Communication Methods – Putting Language Skills to Practice (new topic area)

- In person
- At social gatherings
- By mail
- By phone

Exploring Cultures (existing content in “Eleventh Grade Spanish I”)

Grade Eleven French II

Objects, Prepositions, and Pronouns (new topic area)

- Direct and indirect objects
- Prepositions
- Object pronouns
- Object pronouns and the imperative
- Demonstrative pronouns
- Relative pronouns

Adjectives and Adverbs (new topic area)

- Introduction to adjectives
- Gender agreement of adjectives
- Plural agreement of adjectives
- Position of adjectives
- Comparative sentences
- Possessive adjectives
- Demonstrative adjectives
- Introduction to adverbs
- Forming adverbs
- Memorizing adverbs
- Position and use of adverbs
- Adverbial phrases

Past-Tense, Reflexive, and Future-Tense Verbs (new topic area)

- Past-tense constructions
- Simple past-tense (“La Passe Composé”)
- Imperfect past-tense (“L’Imparfait”)
- Pluperfect tense (“Le Plus-Qué-Parfait”)
- Choosing appropriate past tense
- Literary tenses
- Introduction to reflexive verbs
- Negatives with reflexive verbs
- Questions with reflexive verbs
- Reflexive verbs in the past
- Reciprocal verbs
- Pronominal verbs
- English future-tense constructions
- “Le Futur Proche”
- “Le Futur Simple”
- Use of future with “Si” and “Quand”
- “Le Futur Antérieur”

Conditional Tense and Subjunctive Mood (new topic area)

- Introduction to conditional tense
- Polite forms of conditional tense
- Conditional tense formation
- Past conditional tense
- The verb “Devoir”
- Introduction to French subjunctive
- Forming the subjunctive mood
- Irregular subjunctive verbs
- Specific uses of the subjunctive
- Past subjunctive

Communication Methods – Putting Language Skills to Practice (new topic area)

- In person
- At social gatherings
- By mail
- By phone
- Family communications and customs

Exploring Cultures (new topic area)

- Travel

- School terms
- Technology
- Professions and jobs

Grade Eleven German II

Past Tense (new topic area)

- The regular past tense
- Forming questions in the past tense
- Irregular verbs in the past tense
- The significance of “being”

Future Tense (new topic area)

- Using “werden”
- Present, past, and future
- Irregular verbs in the future tense
- Giving commands
- Informal commands

Perfect Tenses (new topic area)

- The present perfect tense with “haben”
- Irregular perfect tense
- Verbs using “sein” with participles
- The past perfect tense
- The future perfect tense
- The spoken past tense vs. the written past

Modals and Special Prefixes (new topic area)

- The modal auxiliary
- Modals in the past
- Forming the present perfect tense
- Modals in the future
- Inseparable prefixes
- Separable prefixes

Possessives (new topic area)

- Belonging to “You” and “Me”
- Additional possessive adjectives
- A new case
- Additional uses of the genitive
- Body parts
- Games and sports

Opposites and Comparisons (new topic area)

- Antonyms and words of contrast
- “Der” words and “ein” words
- Special nouns

- Making comparisons
- “Good,” “Better,” and “Best”

Conjunctions (new topic area)

- “Und,” “ober,” “aber,” and “denn”
- Conjunctions affecting word order
- Interrogatives used as conjunctions
- “Der,” “die,” and “das”
- New types of prepositions

Passive Voice (new topic area)

- Introduction to the passive voice
- Forming the passive voice
- Using “von,” “durch,” and “mit”
- Identifying passives vs. adjectives

The Subjunctive (new topic area)

- Subjunctive forms that still exist
- “He said” and “She said”
- The past tense of the subjunctive mood
- Additional use for “Wenn!”
- “Als ob”

Communication Methods – Putting Language Skills to Practice (new topic area)

- In person
- At social gatherings
- By mail
- By phone
- Family communications and customs

Exploring Cultures (new topic area)

- Travel
- School terms
- Technology
- Professions and jobs

Grade Eleven Sociology

Social Institutions

- What is a family?

A family can be defined as any relationship involving the following:

- People living together with a commitment
- People forming an economic unit (shared resources)
- People caring for children or other individuals

- People who associate their identity with each other
- What is marriage?

In the United States, marriage is legally sanctioned commitment between two people – a man and a woman.

Marriage and family have changed dramatically in the United States in the following ways:

- Cohabitation (unmarried couples living together) has increased
- Dual-earner marriages (husband and wife both working) are more common
- Single-parent families are growing in increasing numbers
- Education and Religion

Education and religion are both social institutions that do the following:

- Impart values
- Promote beliefs
- Share knowledge

What is the function of education?

- The primary function of education is to transmit knowledge, skills and cultural values within an organized structure

What is the function of religion?

- The primary function of religion is to guide human behavior, give meaning to life and unite believers (on the basis of shared beliefs, rituals and a sacred or supernatural force)

*Discussion Question: What social institutions do you belong to? How do you see your role in these institutions evolving in the future?

Grade Eleven Character Development

Character Awareness

- Can we change our character?

We can change how we view parts of ourselves and how we process memories and experiences affecting our character.

How can we change our character? By learning self-acceptance and radiating positive energy

- Discussion topic: Are there aspects of your character that you would like to change? What factors might have contributed to these parts of yourself? Consider memories or experiences that may be associated with your outlooks.

Levels of Awareness

- Love

Love is a level of personal awareness that is not to be confused with the emotion of “love” – rather it refers to an unconditional love, understanding and compassion for the world around you. At this level, people place their logic and abilities aside to focus on conscience – the sense of right and wrong. Motives at this level are pure and uncorrupted by the desires of the ego and are guided by a force greater than oneself.

- Joy

Joy is level of personal awareness characterized by pervasive, unshakable happiness. This is the level of saints and advanced spiritual teachers who lead lives that are fully guided by intuition. It marks an expansion of consciousness where people operate at much higher level. Some people can temporarily reach this level following a near-death experience.

Character in Action

- Love: At this level, individuals often commit to a lifetime of service to humanity. Examples of people who have reached this level include Gandhi and Mother Teresa – people guided by a stronger force than themselves and dedicated to improving the world.
- Joy: At this level, individuals radiate a happiness that affects everyone around them. People at this stage are led by a higher power and look at life from an elevated perspective.
- Extend discussion of love and peace, considering individuals in history who have exemplified these levels of awareness. What must it have been like to be around them? What can they teach us about the world and ourselves?

Grade Eleven Health & Wellness

Stress

- What causes stress?

Many factors cause stress – stress can result from any change that requires you to change your methods of doing something

- Stress can result from a variety of occurrences (major or minor) including:
 - Moving
 - Loss of a loved one
 - Job change
 - Pregnancy
 - Schedule change
 - Weather change

- Traffic jam
 - Lost personal items (keys, etc.)
 - Electrical outage
- Stress can be a healthy, normal part of life – however, *excessive* stress can lead to physical and emotional health problems including:
 - Physical: damage to heart, increased body fat, decreased energy, interrupted sleep, muscle tension, stomach acid and indigestion, weakened immune system
 - Emotional: anxiety, depression
 - How to reduce daily stress:
 - Take breaks throughout the day to do activities you enjoy such as:
 - Reading
 - Writing
 - Walking
 - Singing
 - Listening to music

Anxiety

- What causes anxiety?

Anxiety can result from any situation that involves something new, unknown or dangerous – anxiety is often a positive reaction, as it prepares you physically and emotionally for difficult situations.

- What is an anxiety disorder?

Anxiety disorders occur when anxiety levels fail to assist you in coping with situations and instead dramatically disrupt your daily life. Anxiety disorders are illnesses that are connected to biological makeup (genetics, family history) as well as past experiences.

Symptoms of anxiety disorders:

- Excessive worrying about daily life (health, money, job, family, etc.)
- Difficulty relaxing or achieving restful sleep
- Physical reactions including twitching, trembling, headaches, irritability, muscle tension, sweating
- Feelings of breathlessness or being light-headed
- Nausea or bathroom frequency
- Palpitations or chest pain

- Exhaustion, difficulty concentrating

Depression

- What causes depression?

Depression is often caused by an imbalance of hormones in the brain; depression is often experienced in connection with anxiety disorders.

- Symptoms of depression:
 - Reduction in motivation, energy and concentration
 - Change in sleeping and eating patterns
 - Lack of interest in school, work or hobbies
 - Feelings of sadness
- How to treat anxiety and depression:
 - Counseling
 - Dietary supplements
 - Nutritional therapies
 - Medication
 - Exercise

Suicide

- What is suicide?

The process of taking one's own life; suicide ranks among the top five causes of death from adolescence to middle age.

- Suicidal behavior

Warning signs and symptoms of suicidal behavior include the following:

- Feelings of hopelessness and worthlessness
- Fascination with death or dying
- Poor impulse control
- Antisocial behaviors (including drug and alcohol abuse)
- Excessive risk taking

- Suicide prevention

Be alert for the above symptoms and seek medical help immediately; additional resources are available at: www.mentalhealth.org/suicideprevention

Grade Eleven Home Skills

Home & Property Management

- Home Safety and Security:

Identify the biggest threats to your home and possessions: personal accidents and injury, fire, electrocution, extreme weather and burglary

- Tips for making your home as safe as possible:

- Select products and materials that meet current safety requirements
- Do not attempt do-it-yourself projects that you cannot safely complete
- Install working alarms (burglar alarms, fire alarms)
- Ensure door and window locks are in working order
- Install external lighting sources and keep plants and hedges in front of doors and windows trimmed

- Pet Care:

- Understand the significant responsibility of family pets. Pets need to be fed, walked, bathed, brushed, taken to the vet, given medication and boarded (or cared for by friends or family) if you go out of town.

Insurance

- Insurance can protect you against the losses associated with property, life or health.
 - Primary types of insurance include:
 - Homeowners' Insurance: typically covers loss of and damage to property due to theft, fire or various other causes
 - Auto Insurance: typically covers damage or theft of vehicle and medical bills for injuries caused in auto accidents
 - Life Insurance: typically covers related expenses for loss of life and associated income

- Health Insurance: typically covers preventative healthcare and a portion of office visits, hospital care, prescriptions, etc.

Auto Maintenance

- Understand the important of auto maintenance – proper and proactive auto maintenance will save you time and money by minimizing the need for auto repairs. Refer to the owner’s manual for specific service guidelines for your vehicle.
 - For a chart on basic automotive maintenance including common service requirements, visit:
<http://theserviceadvisor.com/maintain.shtml>
 - Video Tutorial: How to Check Engine Oil Levels
http://www.youtube.com/watch?v=_lbK6flCqfk

Grade Eleven Personal Finances

Credit

- What is credit?

Credit is borrowed money that you can use to make immediate purchases and repay the funds at a later time.

There are pros and cons to using credit:

Pros:

- Convenience and immediacy
- Establishing a credit history
- Ability to finance major purchases (house, car) over time

Cons:

- Temptation to spend more money than you have or are able to pay back
- Interest accumulation on money borrowed
- Debt accumulation

How to manage your credit effectively:

- Pay your credit card/loan payments as soon as statement arrives
 - o Late payments can result in higher interest rates

 - Do not take cash advances or accept convenience checks
 - o The fees on these services are very high and difficult to repay

 - Do not apply for too much credit
 - o Excessive credit makes you appear as a high-risk customer to creditors

 - Pay more than the minimum payment
 - o Minimum payments will keep you on a course to remain in debt because you are primarily paying toward interest only

 - Do not carry balances
 - o Only charge what you can pay off at the end of every month; this will cut interest charges and leave you less likely to accumulate debt
- What is a credit score? How is it determined?

A credit score is a figure that lenders use to determine how likely a borrower is to repay their debts on time. The most widely used credit scores are known as FICO scores – three separate scores computed by credit history with three major credit bureaus.

FICO scores are determined by several factors including the following:

- How long you have used credit
- How often you pay on time
- How much you owe
- Length of employment with current employer

What is a good credit score?

Every lender considers different factors in evaluating credit scores; however, an excellent credit score would be 740 or higher (out of 850); anything below the mid-600s will probably result in poor credit options including high interest rates or denial of credit altogether.

- How to improve your credit score:
- Check your credit report for any errors that may have lowered your score

- Pay down the high balances on your credit cards
- Pay all bills as soon as they arrive; pay more than the minimum; pay balances off each month
- Pay off any old, outstanding bills – they will not go away just by ignoring them
- Expand your credit history (if it is too limited) – consider adding another line of credit and making timely payments to demonstrate responsible credit habits

- Identity Theft:

Identity thieves open fraudulent accounts in your name or change the address on your credit cards and take over accounts you already have. These thieves can then run up huge bills and leave you with the payment. The result can be devastating to your personal credit and financial future.

To prevent identity theft, consider taking the following steps:

- Put a security freeze on your credit account – this prevents anyone from opening accounts in your name without your personal authorization
- Do not carry critical information (pin number, social security card number) in your wallet
- Ask that your credit reports display only the last four digits of your Social Security number
- Do not provide personal information to people who call or send email inquiries
- Do not store financial passwords in your computer
- Shred financial records before throwing them out
- Check your credit report regularly

Large Purchases

- What are the largest purchases typically made in one's lifetime?

Homes and automobiles; these purchases require special consideration as they will affect your current and future financial outlook

- Buying a Home

The decision to buy a home (rather than rent) should include consideration of the following factors:

- How long will you be living in the area? (If you only plan to live in an area for two years or less, renting may be a better option)

- Are you financially secure or dealing with heavy debt? (If you have financial strain, you may pay more or not qualify for a mortgage; homeowner's expenses such as property taxes, insurance and maintenance may also be too overwhelming)
 - What is the real estate market like? (Locations with high real estate prices or periods when interest rates are high indicate poor home-buying conditions)
 - How will a mortgage benefit you? (Tax breaks on mortgage interest paid, appreciation on home value, pride in ownership)
- Buying an Auto

Unlike a house, a car is a "depreciating asset" – an item that decreases in value the longer you have it. The decision to buy a car should include consideration of the following factors:

- Do you need a car? (Public transportation is a valuable option in some cities)
- Do you need a different car? (If you have a reliable, paid-off car that does not require costly gas or maintenance, you are better off keeping the same car)
- How much do you owe on your current vehicle? (If you owe more than your car is worth, you should not sell it – refinancing it may be a better option)
- What type of car fits your needs best? (Smaller cars are more economical – they typically cost less, get better gas mileage, are cheaper to insure, etc.)

Auto Loans

If you cannot pay cash for a car, it is important to find a viable financing option. Consider the following:

- Lenders evaluate your income in relation to a projected car payment – most lenders look for a 13% payment/income ratio (example: if you make \$3,000 a month, your car payment should not exceed 13% (\$390) of that total)
- Lenders typically require 10% cash down to cover signing fees including tax, tag and registration, and licensing
- Limit the length of your loan by buying a reliable car for the least number of payments you can afford
- Think of a car as a long-term investment; the less time you keep a car, the more money you lose on the investment

Auto Leasing

Leasing involves borrowing a car for a specified number of months or years at a monthly payment, then giving the car back at the end of the contract; the option can result in lower payments than a purchase but leasing is not an investment – it is a long-term rental car agreement

Communication

- I-Messages: non-threatening, healthy model of communication that gives child information about how their behaviors affect parent.

- Three components of I-Messages:

1. When you (state the problem behavior)
2. I feel (identify emotion aroused)
3. because (provide a logical reason for emotion)

Example: When you scream in the car I feel scared because I may get distracted or not hear traffic warnings and we could get in an accident.

- Active Listening: a form of listening wherein parent uncovers emotional content of message being sent by child

- How to actively listen:

1. When child brings up a problem they are having, do not provide answers or agreements; invite children to say more with open-ended phrases such as "Oh," "Really," "Interesting," or "Mmmm."
2. Rephrase their concerns in your own words to validate their feelings without inserting your own thoughts or opinions.
Example: Child: "Mommy, Sally won't let me be the princess when we play!"

Parent: "You don't like that you never get to play the princess."

3. Allow child opportunity to work through the situation on their own while you listen; understand that child may not always reach a resolution to their problem while you listen – it may happen later on, after they reflect on it. Invest your time and trust that child has ability to solve their own problem.

- Benefits of active listening: allows child to express their feelings in their own way, even negative thoughts and feelings; gives parent stronger insight on child's perspective
- When active listening is inappropriate: when parent does not have adequate time to fully interact with child, when child wants privacy, when child is requesting specific information

- Mutual Solutions
 - Parents and children should play an equal and shared part in determining acceptable solutions to relationship problems
 - Working together, parent and child can reach more effective solutions to issues
 - Process gives child more responsibility and inspires a greater respect for the solution – and a higher likelihood of sticking to the agreement

- Problem ownership
 - Identify who owns a problem: The Parent; The Child; or The Relationship
 1. Parent Problem: parent has their own feelings of unacceptance about a situation
Example: Child is interrupting an important phone call of parent
Solution: Use of I-Messages
 2. Child Problem: child has a problem independent of their parents
Example: Child is not getting along with one of their friends
Solution: Use of active listening
 3. Relationship Problem: shared conflict between parent and child
Example: Parent and child in disagreement over how to clean a room or how clean it should be kept
Solution: Determine mutually acceptable solution

- Non-verbal communication: gestures, body language, actions that communicate messages without words
 - Body language can contradict messages sent to children – need to be genuinely interested and concerned to help children
Examples of negative body language: yawning, raising eyebrows, looking at clock, frowning

- Communication awareness: parents must become aware of their own communicative responses and techniques in interactions with their children.
 - Setbacks in parent-child communication – blaming, lecturing, questioning, minimizing, agreeing, questioning – all of these tactics allow parents to insert their own judgments and opinions on an issue; child should be encouraged to make their own judgments
 - Communicating while angry – express anger/disappointment to child in a non-destructive manner: refrain from yelling at child but express feelings of anger about action child

engaged in, recognize importance of taking a parental “time out” to cool off and gain composure

Grade Eleven Study Skills

Test-Taking Strategies

- The test-taking process can create worry and anxiety before, during and after a test.
Tips for coping with test-taking anxiety:
 - Discuss test content with instructor and classmates
 - Develop effective study skills
 - Spread your studying over a longer period rather than cramming at the last minute
 - Review your text, notes and homework assignments
 - Use index cards for important concepts or formulas
 - Take a practice test
 - Avoid studying directly before test; relax or do another activity before test time
 - Be a few minutes early for a test to organize yourself; but do not arrive too early
 - Take deep breaths
 - Think positively
 - Visual a calm, pleasing scene if you begin to feel anxious
- There are several types of testing formats including:
Objective – only one correct answer is possible (multiple choice, true-false, short-answer, problem-solving)
Tips for objective tests:
 - Look over the entire test before answering any questions
 - Mark difficult questions to be revisited at the end of the test
 - Read the questions carefully; think of an answer before looking at the options
 - Use the process of elimination to narrow your choices
 - Work quickly; do not spend too much time on any one question
 - Be aware of distracting words (words that *look* like the word to be defined but are not)
 - Pay special attention to words that can change the meaning of a statement (all, always, because, generally, never, none, only, sometimes, usually)

Subjective – no single correct answer exists; a person is graded on how they demonstrate an understanding of the material (essay tests)

Tips for subjective tests:

- Read all directions, underlining important words or phrases
- Consider the amount of time it will take to address each section
- Outline your answer; brainstorm
- Write the answer
- Read the directions again and review your response; proofread and edit

Grade Eleven Career Skills

Professional Development

- Resume

What is a resume? Why is a resume important?

- A document that outlines a job candidate's experience, education and skills
- A resume is often the first impression an employer gets of a potential employee; it usually determines if a job candidate is granted an interview for a position

What factors should be considered in developing a resume?

- The type of job you are seeking: research the industry; read job descriptions/duties; determine if employers in the industry typically look for a specific style of resume (federal resume, curriculum vitae) or section (special skills, volunteer experience)
- Choose a resume format: chronological (listing work experience in order from most recent) and combination (lists relevant skills and career milestones before work experience) are the most common formats
- Write your resume:
 - Be honest, professional and concise
 - Include information relevant to the job you are seeking
 - Include personal contact information including address, phone number and email address (do not use inappropriate email address names)
 - Use clear, easy-to-read fonts

Review industry-specific resume samples at:
<http://www.resume-resource.com/samples.html>

- Cover Letter

What is a cover letter? Why is a cover letter important?

- A cover letter is used to introduce your resume to a potential employer; it provides you with an opportunity to sell your skills and demonstrate the benefit you could bring to an organization

What factors should be considered in developing a cover letter?

- Format: use a professional business letter format; view samples at <http://workbloom.com/cover-letter/cover-letter-samples.aspx>
- Employer name and address: determine a specific hiring manager or point of contact and address letter to that individual at the correct company address; use appropriate salutations (Dr., Mrs.)
- Return address and contact information: include your personal information
- Use appropriate salutations closing, expressing appreciation for consideration and include your personal signature

- The Job Interview

What is a job interview?

A job candidate's opportunity to meet with an employer and showcase their qualifications.

Preparation for Interview:

- Learn about the employer and the position
- Review your qualifications for position
- Be ready to briefly describe your experience as it relates to position
- Be ready to answer broad questions including: "Why should I hire you?" "Why do you want this job?" and "What are your strengths and weaknesses?"
- Take care in your personal appearance: be well groomed, dress professionally, do not chew gum
- Bring any of the following items that may be appropriate to the position:
 - Identification and/or social security card
 - Resume or application
 - References list – three people (not relatives) who can speak positively about your work performance/history; include names, relationships, phone numbers/emails
 - Transcripts

The Interview Itself:

- Be early

- Learn the name of your interviewer and greet him/her with a firm handshake
- Use good manners with everyone you meet
- Use proper English – avoid slang
- Be enthusiastic and cooperative
- Use positive body language – eye contact, good posture
- Ask questions about the organization and the position
- Avoid questions about salary/wages until a job has been offered
- Thank the interviewer when you leave and shake hands
- Send a short thank you note to the interviewer following the interview

Grade Eleven Business Management

Managing People

Recognize that the ability to effectively manage people is a learned skill involving many functions. The following three-step method provides a quick, effective way to manage people:

1. Goal Setting

- o Establish and agree on goals and appropriate behavior with your team members
- o Record each goal on a separate sheet of paper; identify ways to measure progress toward goals
- o Inform team members that you will provide feedback on their performance through praising and reprimands

2. Praising

- o Seek out good behavior and/or strong performance by your team members
- o Provide clear, positive feedback – specifically state what you liked about their behavior and how their efforts helped the team and the entire organization
- o Allow time for silence after you praise a team member, enabling them to “feel” your positive reaction

- Shake hands or pat team member on the back and encourage similar behavior in the future
- Recognize instances when you, as a manager, are performing well – this increases productivity in yourself and, consequently, in your team

3. Reprimanding

- Respond immediately to a wrongdoing or poor performance by a team member
- Provide a clear explanation of what was done wrong and why it was unacceptable
- Do not attack a person's character; identify the *behavior* as the wrongdoing
- Allow time for silence after you reprimand a team member, enabling them to "feel" your negative reaction
- Shake hands or pat team member on the back and remind them how valuable they are to your team and organization
- Allow yourself, as the manager, to move on after the reprimand and put it behind you

Training People

Effective managers ensure the people they are managing are trained in how to perform their job. A manager can perform training functions themselves or delegate training to another team member and supervise the progress.

Every manager should have a training strategy including the following:

- Documents/Manuals – a written list of policies and procedures should be available to trainees. It can guide the training process and provide a resource for trainees to follow when problems/questions arise in the future.
- Trainer Selection – managers should carefully oversee the training process if they choose to delegate training functions to another team member; often, people who are proficient at doing a job are not proficient at explaining how to do it to others. Follow-through and consistency are important in choosing a trainer – trainers can also benefit from attending seminars or training sessions of their own.
- Hearing, Seeing, Doing – trainees should be given the opportunity to learn procedures in the three methods of learning (hearing an explanation of the procedure, watching the procedure being performed and performing the procedure themselves)

Careers by Field (continued)

- **Engineering**

The engineering field is based on the application of science and math to develop economic solutions to technical problems. Engineers often develop new products – the development process requires engineers to research, test, design and maintain technical components for effectiveness, cost, reliability and safety standards. Most engineers are employed in corporations, laboratories and industrial plants. There is a strong demand for engineers – especially those with highly-specialized focus.

Occupations in the field:

- Electrical
- Mechanical
- Chemical
- Aeronautical/aerospace
- Biomedical
- Nuclear
- Architectural
- Environmental
- Civil
- Industrial

- **Building Trades**

The building trades are comprised of individual who construct, install or repair various structures or fixtures. There are varying levels of specialization within the building trades; the most experienced workers are able to work in a variety of settings including residential and commercial arenas. Workers are either self-employed as contractors or work for construction companies, manufacturing firms or several other types of organizations. The work can be strenuous as it often involves a great deal of physical labor and precision.

Occupations in the field:

- Carpenter
- Plumber
- Electrician
- HVAC Technician
- Brick/Stone Mason
- Architecture
- Drafting and drawing
- Auto/motorcycle mechanic
- Green jobs
- Machinist
- Contractor/construction worker
- Locksmith
- Home inspector

- **Hospitality**

The hospitality industry employs people in various service functions, especially in food, hotel and entertainment venues. Workers in the industry are involved in daily operations of service establishments such as restaurants, hotels and other facilities. A major focus in these occupations is customer service, as the consumer is the driving force behind the industry.

Occupations in the field:

- Hotel management
- Restaurant management
- Wait staff
- Chef
- Food preparation worker
- Caterer
- Bartender
- Gaming services worker
- Concierge staff
- Travel agent

- **Transportation**

The transportation industry employs individuals in a variety of arenas from service and support to mechanics and repairs. Workers are often employed by large establishments and can work in terminals, airplanes or offices. The transportation industry has undergone significant changes due to national health and safety concerns, resulting in more restrictions and regulations throughout the industry.

Occupations in the field:

- Air traffic controller
- Aircraft pilot
- Flight engineer
- Flight attendant
- Airport personnel
- Motor vehicle operator
- Bus driver
- Taxi driver and chauffeur
- Truck driver and sales worker
- Rail transportation worker
- Water transportation worker

- **Farming**

The farming industry employs workers to manage the systems involved with getting food, plants and other natural products to the marketplace. Workers are typically employed on farms or ranches as well as nurseries and slaughterhouses. Activities mostly include planting and harvesting crops, installing irrigation and delivering animals – there is increasing demand for workers with high skills and technical job knowledge.

Occupations in the field:

- Agricultural worker
- Agricultural inspector
- Fisher and fishing vessel operator
- Forest and conservation worker
- Logging worker

- **Other Trades**

- Beautician/cosmetologist
- Barber

- Secretary
- Day care specialist
- Gardener/landscaper
- Funeral director
- Interior decorator
- Real estate agent
- Tailor/seamstress
- Retail sales/cashier
- Janitor/maintenance worker

Grade Eleven Entrepreneurship

Reasons to Become an Entrepreneur

There are many reasons people choose to start their own business – it is important to consider your personal reasons for wanting to start your own business and determine if they are the right reasons.

The right reasons to start a business:

- For creation of wealth – making money is a primary goal of any business; however, wealth can also be measured in good will, reputation, partnership and experience
- For a higher purpose – to fill a need, empower others, create opportunities, reach shared goals
- For creativity – building and nurturing a business requires constant generation of ideas and solutions
- For a challenge – risk and difficulty can inspire feelings of excitement and satisfaction
- For independence – being able to make your own decisions and do things according to your individual values (rather than the values of a boss)

The wrong reasons to start a business:

- To get rich quick – it takes more than financial motivation to make a business work
- To escape another job – discontentment in current employment should not be a main factor in starting your own business
- To be your own boss – it can be surprisingly difficult to guide your own tasks and make critical decisions
- To have more free time – starting a business can be time-consuming and may likely require even more time than other types of employment
- To prove something – many people start a business because they believe they can do anything and everything “better” than others; ego should not drive a business venture

Pros and Cons of Entrepreneurship

There are advantages and disadvantages to entrepreneurship. It is important to consider the following factors associated with entrepreneurship:

Pros:

- Excitement – associated risk brings a feeling of adventure
- Fewer rules – approval processes and constraints are lessened or eliminated
- Originality – being able to offer a new service or product
- Competition – being able to offer service or product at a lower expense than competing businesses
- Independence – being able to make important decisions and not having to “answer” to anyone else
- Flexibility – being able to schedule work hours around other commitments or activities
- Freedom – being able to work when, how and where you want
- Pay – being able to pocket more money for the work that is done (rather than an employer taking a large percentage of the payment)

Cons:

- Pay – giving up the security of a regular paycheck; awaiting initial profit
- Benefits – giving up benefits typically offered by larger employers (health insurance, retirement plans, etc.)
- Work Schedule – your work schedule can be unpredictable and you may have to be available at “off hours” to handle emergencies that arise with your business
- Administration – you do not have authority figures to rely on for difficult questions and decisions
- Staffing – you are ultimately responsible for hiring, firing, supervising and training staff

Twelfth Grade

Free World U

Calculus

Limits of Values of Functions

- Definition and Graphical Interpretation
Demonstrate knowledge of both the formal definition and the graphical interpretation of limit of values of functions, including one-sided limits, infinite limits, and limits at infinity
- Convergence and Divergence
Students know the definition of convergence and divergence of a function as the domain variable approaches either a number or infinity
- Function Theorems
Students prove and use theorems evaluating the limits of sums, products, quotients, and composition of functions
- Calculators and Limits
Students use graphical calculators to verify and estimate limits
- Special Limits
Students prove and use special limits, such as the limits of $(\sin(x))/x$ and $(1-\cos(x))/x$ as x tends to 0
- Continuity of a Function
Students demonstrate knowledge of both the formal definition and the graphical interpretation of continuity of a function
- Intermediate and Extreme Value Theorem
Students demonstrate an understanding and the application of the intermediate value theorem and the extreme value theorem

Derivative of a Function

- Understanding Derivatives
Students demonstrate an understanding of the formal definition of the derivative of a function at a point and the notion of differentiability
- Slope of the Tangent Line
Students demonstrate an understanding of the derivative of a function as the slope of the tangent line to the graph of the function
- Instantaneous Rate of Change
Students demonstrate an understanding of the interpretation of the derivative as an instantaneous rate of change. Students can use derivatives to solve a variety of problems from physics, chemistry, economics, and so forth that involve the rate of change of a function
- Differentiability and Continuity
Students understand the relation between differentiability and continuity
- Deriving Derivative Formulas
Students derive derivative formulas and use them to find the derivatives of algebraic, trigonometric, inverse trigonometric, exponential, and logarithmic functions
- Chain Rule
Students know the chain rule and its proof and applications to the calculation of the derivative of a variety of composite functions

- Parametrically Defined Functions
Students find the derivatives of parametrically defined functions and use implicit differentiation in a wide variety of problems in physics, chemistry, economics, and so forth
- Derivatives of Higher Orders
Students compute derivatives of higher orders

Calculus

- Theorems and Rules
Students know and can apply Rolle's theorem, the mean value theorem, and L'Hôpital's rule
- Sketching Graphs of Functions
Students use differentiation to sketch, by hand, graphs of functions. They can identify maxima, minima, inflection points, and intervals in which the function is increasing and decreasing
- Zeros of a Function
Students know Newton's method for approximating the zeros of a function
- Solving Optimization Problems
Students use differentiation to solve optimization (maximum-minimum problems) in a variety of pure and applied contexts
- Solving Related Rate Problems
Students use differentiation to solve related rate problems in a variety of pure and applied contexts
- Defining the Definite Integral
Students know the definition of the definite integral by using Riemann sums. They use this definition to approximate integrals
- Applying Definition of the Integral
Students apply the definition of the integral to model problems in physics, economics, and so forth, obtaining results in terms of integrals
- Fundamental Theorem of Calculus
Students demonstrate knowledge and proof of the fundamental theorem of calculus and use it to interpret integrals as antiderivatives
- Applying Definite Integrals
Students use definite integrals in problems involving area, velocity, acceleration, volume of a solid, area of a surface of revolution, length of a curve, and work
- Integrals of Various Functions
Students compute, by hand, the integrals of a wide variety of functions by using techniques of integration, such as substitution, integration by parts, and trigonometric substitution. They can also combine these techniques when appropriate
- Inverse Trigonometric Functions
Students know the definitions and properties of inverse trigonometric functions and the expression of these functions as indefinite integrals

- Integrals of Rational Functions
Students compute, by hand, the integrals of rational functions by combining the techniques in standard 17.0 with the algebraic techniques of partial fractions and completing the square
- Integrals of Trigonometric Functions
Students compute the integrals of trigonometric functions by using the techniques noted above
- Simpson's Rule and Newton's Method
Students understand the algorithms involved in Simpson's rule and Newton's method. They use calculators or computers or both to approximate integrals numerically
- Improper Integrals
Students understand improper integrals as limits of definite integrals
- Convergence and Divergence
Students demonstrate an understanding of the definitions of convergence and divergence of sequences and series of real numbers. By using such tests as the comparison test, ratio test, and alternate series test, they can determine whether a series converges
- Convergence of Power Series
Students understand and can compute the radius (interval) of the convergence of power series
- Manipulating Terms of a Power Series
Students differentiate and integrate the terms of a power series in order to form new series from known ones
- Taylor Polynomials and Series
Students calculate Taylor polynomials and Taylor series of basic functions, including the remainder term
- Elementary Differential Equations
Students know the techniques of solution of selected elementary differential equations and their applications to a wide variety of situations, including growth-and-decay problems

Probability and Statistics

Basic Probability and Statistics

- Independent Events
Know the definition of the notion of independent events and use the rules for addition, multiplication, and complementation to solve for probabilities of particular events in finite sample spaces
- Conditional Probability
Students know the definition of conditional probability and use it to solve for probabilities in finite sample spaces
- Discrete Random Variables
Demonstrate an understanding of the notion of discrete random variables by using them to solve for the probabilities of outcomes, such as probability of the occurrence of five heads in 14 coin tosses

- Standard Distributions
Students are familiar with the standard distributions (normal, binomial, and exponential) and can use them to solve for events in problems in which the distribution belongs to those families
- Standard Deviation
Students determine the mean and the standard deviation of a normally distributed random variable
- Mean, Median and Mode
Students know the definitions of the mean, median, and mode of a distribution of data and can compute each in particular situations
- Variance and Standard Deviation
Students compute the variance and the standard deviation of a distribution of data
- Displaying Data
Organize & describe distributions of data by using a number of different methods: frequency tables, histograms, standard line & bar graphs, stem & leaf displays, scatterplots, box-and-whisker plots

Advanced Probability and Statistics

- Problems Having Finite Sample Spaces
Solve probability problems with finite sample spaces using the rules for add., mult., & complementation for probability distributions; understand the simplifications that arise with independent events
- Continuous Random Variables
Understand notion of a continuous random variable; interpret probability of an outcome as the area of a region under the graph of the probability density function associated with the random variable
- Mean of a Discrete Random Variable
Students know the definition of the mean of a discrete random variable and can determine the mean for a particular discrete random variable
- Variance of a Discrete Random Variable
Students know the definition of the variance of a discrete random variable and can determine the variance for a particular discrete random variable
- Central Limit Theorem
Students know the central limit theorem and can use it to obtain approximations for probabilities in problems of finite sample spaces in which the probabilities are distributed binomially
- Least Squares Regression
Students find the line of best fit to a given distribution of data by using least squares regression
- Correlation Coefficient
Students know what the correlation coefficient of two variables means and are familiar with the coefficient's properties
- Working With a Statistic
Students are familiar with the notions of a statistic of a distribution of values, of the sampling distribution of a statistic, and of the variability of a statistic

- Relations Between Distribution Data
Students know basic facts concerning the relation between the mean and the standard deviation of a sampling distribution and the mean and the standard deviation of the population distribution
- Determining Confidence Intervals
Students determine confidence intervals for a simple random sample from a normal distribution of data and determine the sample size required for a desired margin of error
- Determining P- Value
Students determine the P- value for a statistic for a simple random sample from a normal distribution
- Chi-Square
Students are familiar with the chi- square distribution and chi- square test and understand their uses

Physics

Motion and Forces

- Constant and Average Speed
Students know how to solve problems that involve constant speed and average speed
- Newton's First Law
Students know that when forces are balanced, no acceleration occurs; thus an object continues to move at a constant speed or stays at rest (Newton's first law)
- Newton's Second Law
Students know how to apply the law $F=ma$ to solve one-dimensional motion problems that involve constant forces (Newton's second law)
- Newton's Third Law
Students know that when one object exerts a force on a second object, the second object always exerts a force of equal magnitude and in the opposite direction (Newton's third law)
- Gravity Relationships
Students know the relationship between the universal law of gravitation and the effect of gravity on an object at the surface of Earth
- Applying Force to an Object
Applying force to an object perpendicular to the direction of its motion causes the object to change direction but not speed (gravitational force causes a satellite to change direction but not speed)
- Circular Motion
Students know circular motion requires the application of a constant force directed toward the center of the circle

Conservation of Energy and Momentum

- Kinetic Energy
Students know how to calculate kinetic energy by using the formula $E=(1/2)mv^2$

- Gravitational Potential Energy
Students know how to calculate changes in gravitational potential energy near Earth by using the formula (change in potential energy) = mgh (h is the change in the elevation)
- Conservation of Energy
Students know how to solve problems involving conservation of energy in simple systems, such as falling objects
- Momentum
Students know how to calculate momentum as the product mv ; momentum is a separately conserved quantity different from energy; an unbalanced force on an object produces a change in its momentum
- Elastic and Inelastic Collisions
Students know how to solve problems involving elastic and inelastic collisions in one dimension by using the principles of conservation of momentum and energy

Heat and Thermodynamics

- Heat Flow and Work
Students know heat flow and work are two forms of energy transfer between systems
- First Law of Thermodynamics
Work done by a heat engine working in a cycle is the difference between the heat flow into the engine at high temp and the heat flow out at a lower temp; this is example of law of conserve. of energy
- Thermal Energy
The internal energy of an object includes the energy of random motion of the object's atoms and molecules, often called thermal energy. The greater the temperature, the greater the energy of motion
- Energy Levels Over Time
Students know that most processes tend to decrease the order of a system over time and that energy levels are eventually distributed uniformly
- Entropy
Students know that entropy is a quantity that measures the order or disorder of a system and that this quantity is larger for a more disordered system

Waves

- Identifying Waves
Waves carry energy from one place to another; identify transverse and longitudinal waves in mechanical media, such as springs and ropes, and on the earth (seismic waves)
- Solving Problems with Waves
Students know how to solve problems involving wavelength, frequency, and wave speed
- Sound Waves
Students know sound is a longitudinal wave whose speed depends on the properties of the medium in which it propagates
- Radio, Light and X-ray Waves
Students know radio waves, light, and X-rays are different wavelength bands in the spectrum of electromagnetic waves whose speed in a vacuum is approximately 3×10^8 m/s (186,000 miles/second)

- Characteristic Properties of Waves
Students know how to identify the characteristic properties of waves: interference (beats), diffraction, refraction, Doppler Effect, and polarization

Electric and Magnetic Phenomena

- Predicting Voltage or Current
Students know how to predict the voltage or current in simple direct current (DC) electric circuits constructed from batteries, wires, resistors, and capacitors
- Ohm's Law
Students know how to solve problems involving Ohm's law
- Resistive Elements
Any resistive element in a DC circuit dissipates energy, which heats the resistor; calculate the power (rate of energy dissipation) in any resistive circuit element by using the formula $Power = IR$ (potential difference) $\times I$ (current) = I^2R
- Transistors
Students know the properties of transistors and the role of transistors in electric circuits
- Electric Fields
Students know charged particles are sources of electric fields and are subject to the forces of the electric fields from other charges
- Sources of Magnetic Fields
Students know magnetic materials and electric currents (moving electric charges) are sources of magnetic fields and are subject to forces arising from the magnetic fields of other sources
- Direction of Magnetic Fields
Students know how to determine the direction of a magnetic field produced by a current flowing in a straight wire or in a coil
- Changing Magnetic Fields
Students know changing magnetic fields produce electric fields, thereby inducing currents in nearby conductors
- Plasmas
Students know plasmas, the fourth state of matter, contain ions or free electrons or both and conduct electricity

Grade Twelve American Democracy

Foundations of American Government

- Principles of Government
Government and the state – definition, characteristics, origins, purpose; forms of government; basic concepts of democracy
- Origins of American Government
American political beginnings – English documents, colonies; the coming of independence; the critical period – Articles of Confederation; creating the Constitution; ratifying the Constitution – Federalists & anti-Federalists

- The Constitution
The six basic principles –popular sovereignty, limited government, separation of powers, checks and balances, judicial review, federalism; formal amendment – amending Constitution; informal amendment – over time by executive decisions, judicial rulings
- Federalism
The division of power – powers of federal government and states; relationship of the national government and the 50 states; interstate relations

Political Behavior

- Political Parties
Parties and what they do; the two-party system; the two-party system in American history; the minor parties; party organization
- Voters and Voter Behavior
The right to vote; voter qualifications ; suffrage and civil rights; voter behavior
- The Electoral Process
The nominating process; elections; money and elections
- Mass Media and Public Opinion
The formation of public opinion; measuring public opinion; the mass media
- Interest Groups
The nature of interest groups; types of interest groups; interest groups at work

The Legislative Branch

- Congress
The national legislature; the house of representatives; the senate; the members of congress
- Powers of Congress
The scope of congressional powers; the expressed powers of money and commerce; other expressed powers; the implied powers; the nonlegislative powers
- Congress in Action
Congress organizes; committees in congress; how a bill becomes a law: the house; the bill in the senate

The Executive Branch

- The Presidency
The president's role and responsibilities; presidential succession and the vice presidency; presidential selection: the Framers' plan; presidential nominations; the election
- The Presidency in Action
The growth of presidential power; the president's executive powers; diplomatic and military powers; legislative and judicial powers
- Government at Work
The federal bureaucracy; the executive office of the president; the executive departments; independent agencies; the civil service
- Financing Government
Taxes; nontax revenues and borrowing; spending and the budget

- Foreign Policy and National Defense
Foreign affairs and national security; other foreign and defense agencies ; American foreign policy overview; foreign aid and defense alliances

The Judicial Branch

- The Federal Court System
The national judiciary; the inferior courts; the Supreme Court; the special courts
- First Amendment Freedoms
The unalienable rights; freedom of religion; freedom of speech and press; freedom of assembly and petition
- Protecting Individual Rights
Due process of law; freedom and security of the person; rights of the accused; punishment
- Civil Rights
Diversity and discrimination in American society; equality before the law; federal civil rights laws; American citizenship

Comparative Political and Economic Systems

- Comparative Political Systems
The political systems of Great Britain, Japan, Mexico, Russia, China compared to the American system and to each other
- Comparative Economic Systems
Characteristics of, role of government in, and advantages/disadvantages of capitalism, socialism, and communism

State and Local Government

- State Governments
State constitutions; state legislatures; the governor and state administration; courtroom functioning; the courts and their judges
- Local Governments
Counties, towns, and townships; cities and metropolitan areas; providing important services; financing state and local government

Grade Twelve Economics

Basic Economic Terms, Concepts and Reasoning

- Basic Economic Concepts
The fundamental economic problem; factors of production; three basic questions; the scope of economics; scarcity, trade-offs, opportunity cost, needs, wants, goods, services, consumers, value, utility, wealth, productivity
- Economic Systems and Decision Making
Traditional, command, and market economies; economic performance; capitalism and free enterprise

- Business Organizations and Economic Institutions
Sole proprietorships, partnerships, and corporations; business growth and expansion; other organizations and institutions, including nonprofit organizations, cooperative associations, labor unions, professional and business and organizations

Microeconomics

- Demand
The demand schedule; the law of demand; change in demand; diminishing marginal utility; elasticity of demand
- Supply
The supply schedule; change in supply; elasticity of supply; the theory of production; three stages of production; the role of cost
- Prices
Advantages; allocation without prices; determination of prices; prices as a system; price supports
- Competition
Pure and monopolistic competition; oligopolies and monopolies; market failures; the role of government, including antitrust legislation and regulation

Macroeconomic Institutions

- Employment, Labor, and Wages
History of the labor movement; resolving union and management differences; labor and wages; employment trends and issues
- Sources of Government Revenues
Taxation; economic impact of taxes; types of taxes; the federal tax system; state and local tax systems; current tax issues
- Government Spending
Two kinds of government spending; impact of government spending; the federal budget; state and local government expenditures; federal deficits and the national debt
- Money and Banking
History and characteristics of money; early banking and monetary standards; development of modern banking; banking reform
- The Federal Reserve System and Monetary Policy
Features, structure, and responsibilities of the Fed; monetary policy, its impact and related issues; bank failures
- Financial Investments, Markets, and Equities
Savings and the financial system; investment considerations; bonds, financial assets, and financial markets; equities, futures, and options

Macroeconomic Policies

- Gross Domestic Product
Measurement methods and considerations; measures of national income; the output-expenditure model; price indices

- Population, Economic Growth, and Business Cycles
American population trends; American economic growth; factors influencing economic growth; productivity and growth; business cycles and fluctuations
- Unemployment, Inflation, and Poverty
Measuring unemployment; kinds of unemployment; inflation in the United States; causes and consequences of inflation; the distribution of income; antipoverty programs
- Achieving Economic Stability
Costs of economic instability; macroeconomic equilibrium; stabilization policies, including demand-side, supply-side, and monetary policies; economic politics

International and Global Economics

- International Trade
Absolute and comparative advantage; barriers to international trade; financing international trade; the trade deficit
- Comparative Economic Systems
Advantages and disadvantages of capitalism, socialism, and communism; the rise and fall of communism; transition to capitalism; varieties of capitalism
- Developing Countries
Interest in and obstacles to economic development; stages of economic development; priorities; financing economic development
- Global Economic Challenges
The global demand for resources; economic incentives and resources; the economic way of thinking

Grade Twelve Health

Effectiveness of Health Data

- Health Promotion
- Illness Prevention Methods
- Primary (Universal) Prevention
- Secondary Prevention

Analyzing Public Health Policies

- Function of Laws
- Function of Media
- Illness Control

The Aging Process

- Aging Affects Vision
- Aging Affects Hearing

- Aging Affects the Immune System

Effects of Healthy Living

- On Individuals
- On the Community
- On Future Generations

Immediate and Long Term Impacts of Health Decisions

- Individual
- Family
- Community

Development of Relationships

- Types of Relationships
- Factors to Consider in Forming a Healthy Relationship
- Responsibilities in Relationships
- Issues Which Enhance or Threaten Relationships
- Laws Relating to Relationships/Marriage
- Importance of Monogamy in Building Trust in a Relationship/Marriage

Grade Twelve Sociology

Social Change

- What is social change?

Social change is the process of altering, modifying or transforming public policies, cultures or social institutions.

- Social change is often enforced by collective behavior – activity that stems from a group's shared response to a situation and results in behavior that typically violates social norms

- What is a social movement?

A social movement is an organized group that operates cooperatively to promote or resist change; types of social movements include the following:

- Reform – aim to improve society through changing a part of a social structure
- Revolutionary – aim to bring about complete change in a social structure (sometimes through extreme, radical methods)
- Religious – aim to bring about significant change in individual's thoughts and behaviors based on belief systems

- Alternative – aim for limited change to a specific aspect of human behavior
- Resistance – aim to prevent change or undo change that has been enacted
- Citizenship

What is a citizen?

- A citizen is a resident of a city or town, including those entitled to vote and enjoy other privileges of that location

What does it mean to be a “good” citizen?

- Good citizenship requires citizens to be responsible and demonstrate actions including:
 - Understanding of government
 - Promotion of community
 - Support of special groups and causes
 - Involvement in the democratic process
 - Consideration for individuals and families
 - Knowledge of history and heritage

Application Exercise

Develop a community project that demonstrates good citizenship. Choose, plan and complete a task that contributes to a social cause. Make a journal to record the following activities:

- Research needs in your community
- Determine your personal motivation for supporting this cause
- Consider action items necessary for making a positive change
- Identify roadblocks, events or attitudes that impact your progress
- Evaluate your success and reflect on the experience

Grade Twelve Character Development

Character Awareness

- Self-Acceptance via Acupressure Point Tapping:

This technique has been proven to cure individuals of unresolved emotional issues *and* physical problems. How it works:

1. The use of positive affirmations to correct negative feelings you have (fears, anger, tragic memories).

Examples:

Even though I have this fear of public speaking, I deeply and completely accept myself.

Even though I have this traumatic memory from childhood, I deeply and completely accept myself.

*Whether you believe in the affirmation or not, it is important to say it aloud so that you are acknowledging your problem.

2. Acupressure Points

A registered nurse/tapping specialist identifies these pressure points and demonstrates the method in the following video clip:

<http://www.youtube.com/watch?v=9I-VDOGqmd4>

** A free manual on this technique is available by email request at the following link:

<http://www.emofree.com/downloadleftmanual.asp>

Levels of Awareness

- Peace

Peace is level of total transcendence. This level is reached by very few individuals.

- Enlightenment

Enlightenment is the highest level of personal awareness where humanity blends with divine power – this level is extremely rare and is associated with Jesus, Buddha, etc.

Character in Action

- Peace: At this level, individuals operate at a perspective above the created universe that surpasses physical existence.
- Enlightenment: At this level, individuals find a final blessed state, free from ignorance, desire and suffering.
- Extend discussion of these highest levels of awareness; contemplate why it is so rare for individuals to achieve these levels.

Grade Twelve Health & Wellness

Dealing with Violence

- Acts of violence (assault, abductions, murder, terrorism) can impact one's emotional well being.

Violent incidents are tragic and can be difficult to discuss but it is important to deal with these experiences in order to avoid long-lasting emotional difficulties.

Methods for dealing with violence:

- Stay informed about the situation; ignore rumors or reports that are false
- Share your feelings with others; understand that others experience fear, anxiety, etc.
- Find a place or activity that helps calm your nerves (go for a walk, draw a picture, etc.)
- Learn what is being done to ensure your safety (review precautions and identify mentors)
- Limit your exposure to violent television, movies and video games
- Identify personal vulnerabilities to violence and determine feasible changes in environment, habits, etc.
- Maintain normal daily activities (follow consistent eating and sleeping patterns)
- Seek professional advice/counseling

Grade Twelve Personal Finances

Investments

There are many available options for investing your money including mutual funds, stocks and bonds and real estate. You should create a sensible, written investment plan to decide how to allocate your money.

What types of investments are available?

- Stocks – effective for building capital in the long term (over a 15-year period, stocks typically outperform bonds and simple bank accounts)
 - o Stock-owning mutual funds are a better way to buy stocks; these funds diversify your investments and balance risks
 - o Individual stocks are best for professional money managers; amateurs who buy individual stocks without a thorough understanding of the market typically lose money
- Bonds – effective for additional income and stability
 - o Medium-term bonds are good for adding to your income with interest earnings
 - o Long-term bonds are good for speculating on falling interest rates
- Investment real estate – effective for building future savings if you can commit the money for at least a 10-year period (a good savings method for retirement)

Principles of investing include:

- Diversify – choose different types of investment options; you need different types of stock funds to keep pace with how various market sectors perform at various times

- Control risk – consider consequences in advance and limit your investments accordingly
- Keep it simple – elementary investment plans and options are all that are needed for effective investing (complicated investment options only serve to educate on financial options – their return is typically no better)
- Reinvest – by reinvesting money made on investments, you will earn compounding interest and ensure larger investment totals
- Rebalance – as your investments go up and down in value, make adjustments to keep your investment plan in place (example: 40% bonds/60% stocks)
- Invest regularly – use a portion of every paycheck toward your investments
- Forget market timing – trying to buy when market is low and sell when market is high is too complicated and risky; stay on course through reinvesting, rebalancing and regular investing
- Be patient – stick to your investment plan and understand that some years you will make money; some you will lose money – keep the long term in mind

Safe Savings

Investments almost always carry some risk because they are linked to the ever-changing market. It is important to keep enough of the following types of money in a safe savings (with no market risk):

- A cash reserve of approximately 3-6 months living expenses (an emergency fund)
- Any fixed expense that has to be met within five years (a house down payment, a vacation, college savings, taxes)
- Any special sum of money (inheritance, etc.) you do not want putting at risk

Security/Insurance

Without insurance to protect your assets, you do not truly own anything – an unfortunate event such as a sickness or an accident can leave you with nothing.

The following types of insurance provide protection for your greatest assets:

- Life Insurance (provides payment to your dependents upon your death)
- Health Insurance (should cover costs of basic hospital services, preventative health care, etc.)
- Disability Insurance (coverage in the event you cannot work due to injury, accident, etc.)
- Auto Insurance (coverage for cost of repairs, theft, bodily injury that can result from auto use)
- Home Insurance (coverage for events that can affect your home – fire, theft, wind, flood, etc.)

In choosing insurance policies, select low-cost options from high-quality companies.

Application Exercise

Choose an occupation and research its average monthly income. Using its salary as a guideline, create a real-life financial plan. Make a journal of the following:

- By researching housing cost of the area you choose to live, find a place that fits within your budget for housing and record specifics on its accommodations
- Determine which bills/expenses you can decrease and/or eliminate
- Factor in costs that you have brought with you to this point (student loans, credit card debt, etc.)
- Identify real-life events that may take your financial plan off-track and determine how you can plan for these scenarios

Grade Twelve Parenting Skills

Conflict

- Know the definition of conflict:
 - Understand that conflict is a normal, healthy occurrence in a relationship
 - It is not important *what* causes conflict – importance is in how it is resolved
- Power struggles: when power is used in parent-child conflicts, one person gets their way while the other ends up losing
 - When parent uses power and child gives in –authoritarian style of parenting
 - When child uses power and parent gives in –permissive style of parenting
 - o Neither of these approaches are effective – someone always loses and child does not learn personal responsibility
 - It is important to use a No-Lose method where parents and children determine mutually acceptable solutions to problems
 - o This approach develops children’s thinking skills and inspires them to carry out their solutions
- Values Collision – children have a right to their own values and beliefs (basic civil rights – cleanliness, personal style, schoolwork, eating habits)
 - Older children will try to separate themselves from parents who try to change them or their values
 - Parents can teach values to their children by modeling their values with their own behavior; parents can teach values by consulting with expertise and providing information about topics
 - Parents must ultimately learn to accept what cannot be changed about their children

- Spousal agreement
 - Spouses do not always have to agree on a solution – that is not an honest approach. Everyone needs to respect their *own* feelings on an issue or behavior.
- Environmental conflict resolution
 - Altering the surrounding environment to prevent/resolve conflicts: simplifying, restricting, child-proofing, planning ahead, preparation, providing alternative activities
- Discipline
 - Punishment becomes unnecessary if parent and child both feel their needs are being met
 - Children must develop responsibility and become *self-disciplined* – behave out of thought for their parents and themselves
 - Recognize that all children (and adults) are different. There will be exceptions to the preceding parenting approaches – especially when situations become out of control and destructive to the child and/or parent. (Review “Tough Love” methods in the following topic)

Dealing with Unusual/Destructive Behavior

- It is important to identify unusual and/or destructive behaviors so they can be addressed. These behaviors include: drug/alcohol use, violence, defiance
- Drugs/Alcohol – Be able to identify potential signs of usage:
 - Significant physical changes (persistent cough, glazed and red eyes, physical ailments, fatigue, lack of coordination, slurred speech)
 - Significant behavioral changes (abrupt shift in personality, new friends, sexual behaviors)
 - Academic problems (low grades, lack of interest, discipline issues)
 - Lying, stealing, urgent need for money
 - Changes in family relationships (arguments, rule breaking)
- Violence – Keeping children safe and promoting non-violent behavior:
 - Talk to your children about ways to solve arguments without violence – identify sources of support (family members, significant adults) that they can turn to
 - Help your child deal with anger – identify anger as a normal feeling but one that needs to be expressed appropriately
 - Monitor the media your child is engaged in: TV, Internet, video games – limit the media containing violent content and address violent incidents encountered together
 - Be a role model by handling problems in nonviolent ways: do not hit your child; cool down; solve problems together
 - Reduce the threat of gun-related violence – if guns are present in your home, ensure your child understands gun safety measures and that your child does not have unsupervised access to guns

- Get involved in your community; join neighbors in activities to reduce violence in your area
- Defiance – outright acts against parental authority; dishonesty; delinquency
 - Identify when defiance becomes a problem with your child:
 - Child's behavior is much worse than what is considered normal for other children in his/her age group
 - Child's behavior is making it difficult for him/her to function as expected
 - Child's behavior is causing emotional distress or harm to him/her or others
 - Use imperative sentences (commands) in communicating your expectations:
 - Tell children what to do (or *not* to do) in clear, authoritative language:

Example: "Clean up your room." or "Do not dawdle. We are leaving in five minutes."

Avoid indirect commands and/or threats such as: "If you do not clean up your room, then I will throw all your stuff away," or "If you do not hurry up, I am leaving without you." This approach diminishes parental authority because children instinctively know that the parent will not follow through on these consequences. As a result, these types of threats impact the parent's credibility and impede their ability to effectively direct their child's behavior.

*Threats should only be made if parents intend to follow through on them; and they should never be a primary mode of communication.
- Finding a Parenting Approach that Works for You
 - There is no "one-size-fits-all" approach to parenting. Every child has a different personality – and every parent will have a different way of dealing with their children's personalities. These factors will affect parenting style. The most important goal in parenting is to find an approach that works for you and your child.
- Tough Love: a parenting method that employs the use of direct, significant consequences to address ongoing, disagreeable behavior in children.
 - Tough Love fundamentals:
 - Do not panic or take your child's negative behavior personally
 - Adopt a strong attitude and confidence in your ability to parent
 - Do not permit or justify destructive behaviors – this would be negligent
 - Attempt to address behaviors through open, honest communication
 - If negative behaviors continue, give child a direct warning of consequence
 - Follow through with a significant consequence, allowing child to face results of his/her actions
 - Example:

A child refuses to follow household rules. After parent communicates their feelings and expectations about the situation, child persists in

breaking the rules. Parent provides child with a warning that there will be significant consequences for their behavior. When child continues to break the rules, parent withdraws material support from child (does not give child money for activities, possessions, etc.).

Method of last resort (for children ages 16 & up):

When teen persist in breaking the rules, parent puts all of the teen's belongings on the front lawn, essentially expelling them from the house whose rules they have refused to follow. This teen no longer is granted access to the comforts of home.

- Parents experiencing guilt from following these tactics can find support from the TOUGHLOVE organization – an international program with parent-run groups offering support to members who are dealing with uncontrollable children. <http://www.4troubledteens.com/toughlove.html>
- Professional Therapy: when other parenting methods have not proven effective and/or you feel isolated from your child, parents should seek advice from professionals in the field of child psychology.
 - How to find a therapist:
 - Contact your local hospital's mental services division – there are referral services for child psychiatrists
 - Do not rely too heavily on referrals from personal friends or family as a therapist who is good for one individual may not necessarily be good for another
 - Research potential therapists and meet with at least three therapists before deciding which one to work with – it is important to feel comfortable with the therapist and it is an appropriate and typical part of the process

Grade Twelve Study Skills

Online Learning

- The Web has made research easier and more convenient; however, with the tremendous amount of information available on the Web, it can be difficult to determine the reliability of the information you find. It is important to identify where the content came from (site names) and how to find the information (search engines).

Tips for navigating the Web:

Site names – web sites are categorized by the organization that owns them and are reflected in the suffix the web site address (URL) ends in:

- .com (commercial) -- typically reserved for individuals and businesses
- .edu (educational) – typically reserved for educational institutions
- .gov (governmental) – typically reserved for government institutions and agencies
- .net (network) – typically reserved for Internet service providers
- .org (organization) – typically reserved for nonprofit organizations and associations

Search engines – enable Web users to enter keywords to find information through a combination of formulas that detect matching data

- Tips for forming a quick, effective search:
 - o Leave out words such as *the*, *a*, *an* or plural form of keywords – search engines do not pay attention to these words
 - o Use quotation marks to find a specific unit of information such as names or titles (example: “Benjamin Bloom”)
 - o Use specific keywords to narrow down results (example: instead of searching for *diabetes* as a broad term, search for *diabetes education* or *diabetes treatment*)
- Revising your search:
 - o Use different words or phrases relating to the term you are looking for
 - o Try a different search engine – an identical search with another search engine may result in more findings
 - o Utilize “advanced search” options on a search engine to help narrow results

Grade Twelve Career Skills

Professional Performance

- Setting Workplace Goals and Priorities:

Why is it important to establish workplace goals and priorities?

- o Goals and priorities drive productivity and increase job satisfaction and work performance.

How to establish workplace goals and priorities:

- Consider the organization's overall vision/mission
- Evaluate specific goals and determine how you can contribute to those goals
- Translate your ideas into specific, measurable projects/tasks
- Evaluate your progress and re-evaluate your contributions as appropriate

- Workplace Etiquette

What is workplace etiquette? Practices and behaviors acceptable in a professional setting

Basic rules of workplace etiquette:

- Be on time – call if you will be late or cannot make it in
- Do not use office resources for your personal use
- Do not work on personal projects at work
- Do not make personal phone calls – if you receive personal calls, keep them brief
- Do not surf the Internet, send personal emails or text messages
- Keep your area clean and clean up after yourself in main areas
- Follow the workplace dress code
- Do your job – be reliable

- Workplace Communication

Why is workplace communication important?

Effective communication in the workplace enables you to establish positive, professional relationships with your co-workers; these relationships foster a productive work environment.

Verbal Communication: (in-person or on the telephone)

- Be enthusiastic and friendly – a positive attitude affects your speech and mannerisms
- Avoid slang and never use foul or offensive language
- Be thoughtful and consider how your behaviors may affect others
- Accept different opinions and welcome a variety of perspectives
- Keep your supervisor and co-workers informed – updates should be provided directly by you

- Avoid unnecessary conflict and gossip
- Avoid taking sides or playing “office politics”
- Do not complain
- When you make mistakes and/or receive criticism:
 - Be accountable – take responsibility
 - Apologize – do not offer excuses
 - Learn from your mistakes

Written Communication: (emails, letters, memos, faxes)

Why is written communication important in a work environment?

Clearly communicating your messages in writing will provide others with a positive impression of you. Ineffective written communication can cause others to question your attitude, attention to detail, level of education, etc.

When is written communication commonly used in the workplace?

- Providing detailed information to clients, co-workers, etc.
- Resolving misunderstandings or clarifying a situation
- Following up on action items

Tips for effective written communication:

- Practice effective grammar and correct spelling – always proofread your documents.
- Be careful what you put in writing – in today’s electronic workplace, retrieval of electronic documents (even deleted ones) is always possible.
- Be formal and objective – remove personal, subjective viewpoints from business writing. Write in the third person – remove “I” and “me” statements wherever possible.
- Use common sense – is your message more effectively conveyed in person or on the phone?
- Avoid statements that can be viewed as potential harassment – do not make references to race, religion, gender, etc.

To review samples of business documents including emails, letters and memos, visit:

http://highered.mcgraw-hill.com/sites/0070880581/student_view0/sample_letters.html

• Meetings

Understand that meetings serve an important function in the workplace – they are used to identify and meet goals. Effective meetings require work before, during and after the meeting takes place.

Before the meeting:

- Plan the meeting – determine the purpose for the meeting (what you hope to accomplish by meeting); ensure a meeting is the most appropriate vehicle for accomplishing the purpose (consider if the goal can be better met through an email discussion or by a highlight in the company newsletter, etc.)
- Ensure attendance – follow up with key participants to ensure their participation in meeting; reschedule if critical staff members are unable to attend
- Distribute meeting materials – provide necessary background information (graphs, reports, etc.) to meeting participants in advance of meeting
- Finalize a written agenda – a document that outlines topics of discussion for meeting; make enough agenda copies to give one to each meeting participant

During the meeting:

- Select a meeting leader or assume the role yourself – this facilitator will help the meeting stay on track and yield productive results
- Ensure each meeting begins with a review of the goals for that meeting as well as an overview of the meeting agenda
- Reference the meeting materials – participants will understand the integral role of these documents and feel a connection to the topic
- Involve participation from all meeting members – ensure every attendee has a role
- Establish a follow-up plan to the meeting – identify action items; assign people and due dates to each item

After the meeting:

- Document, publish and distribute meeting “minutes” – a document outlining discussed action items; this should be distributed within 24 hours of meeting
- Check progress of each action item by following up with the individuals assigned to each task
- Invite feedback about the effectiveness of your meetings – ask participants to share what was effective or ineffective about the meeting process

• Teamwork in the Workplace

Teamwork is an essential part of the workplace and is often a requirement to finish tasks.

How to create effective teams:

- Understand the purpose of project/task; identify outcomes, deadlines
- Engage in team-building exercises: get to know each other, do a social activity together, identify skills/strengths of the team
- Establish team “rules” – attendance, manners, productivity, accountability, etc.
- Assign significant roles: Leader, Note Taker, Progress Chaser, Time-Keeper

- Divide the project into individual tasks – decide who will be responsible for what
 - Hold regular meetings with an agenda, meeting leader, etc.
 - Address problems; identify solutions
- Leadership in the Workplace

Keys to leadership:

- Planning – leaders are proactive rather than reactive. They identify potential problems in an effort to avoid crisis or setbacks. Leaders scope out plans and adapt those plans for new circumstances and opportunities.
- Vision – leaders follow up their planning with a vision. This vision provides direction and keeps goals on track.
- Communication – leaders share their vision with others they lead; this strengthens the leader’s determination to make their vision a reality and others become inspired to take part in the process.
- Decisions – leaders take charge of an action plan by making important decisions and ensuring all actions are carried out.
- Example – a leader inspires others through their own actions and leads by example.

Grade Twelve Survey of Careers

Careers by Field (continued)

- **Armed Forces**

The armed forces industry supports national defense efforts. Military personnel are provided training and work experience in several areas including active combat, administration, construction, engineering, healthcare and human services.

The branches of the U.S. armed forces include:

- Army
- Navy
- Marine Corps
- Air Force
- Air and Army National Guard
- Coast Guard (Department of Homeland Security)

Armed forces occupation areas include:

- Administrative careers – personnel keeps accurate information for planning and managing operations; administrative workers prepare reports, maintain files and review information

- Combat specialty occupations – enlisted individuals serve in infantry, artillery and special forces, operating weapons or executing missions during combat
- Construction occupations – personnel build or repair buildings, equipment or components for military use; these individuals often collaborate with military officers and engineers or other specialists to enhance military capabilities
- Electronic and electrical equipment repair occupations – personnel repair and maintain military equipment including computers, optical equipment, communications or weapons systems; these individuals install, test and evaluate a wide array of instruments and technical controls
- Engineering, science, and technical occupations – personnel operate technical equipment, solve complex problems and provide or interpret information; these individuals typically specialize in one area and provide technical expertise to enhance military functions
- Healthcare occupations – personnel assist medical professionals in treating and providing services for men and women in the military; these individuals provide emergency medical treatment, operate diagnostic tools and perform lab work or healthcare administrative tasks
- Human resources development specialists – personnel recruit qualified personnel, place them in suitable occupations, and provide training programs
- Machine operator and production occupations – personnel operate industrial equipment, machinery, and tools to fabricate and repair parts for a variety of items and structures
- Media and public affairs specialists – personnel assist with the public presentation and interpretation of military information and events
- Protective service specialists – personnel enforce military laws and regulations and provide emergency responses to natural and human-made disasters
- Support service occupations – personnel provide services and support the morale and well-being of military personnel and their families; service teams may include counselors, social workers, psychologists, medical officers, chaplains, personnel specialists and commanders
- Transportation and material-handling specialists – personnel ensure the safe transport of people and cargo by aircraft, motor vehicle or ship
- Vehicle and machinery mechanics – personnel conduct preventive and corrective maintenance on aircraft, automotive and heavy equipment, heating and cooling systems, marine engines and powerhouse station equipment

U.S. Military Links:

The following links provide additional information on military options and the individual branches:

<http://www.usmilitary.com/>

<http://www.armedforcescareers.com/>

<http://www.defense.gov/>

Grade Twelve Entrepreneurship

How to Start a Business

The steps of starting a business:

- An original idea – identifying a need for a product or service and creating something to fill that need
- Research – learning about the need and market for your product/service; evaluating competition; conducting market research (surveys, focus groups, etc.) to understand audience
- Business plan/model – determining a strategy for business growth; establishing business structure (registering business name, obtaining tax identification information and licenses, establishing legal structure – partnership, sole proprietorship, etc.); identifying employer responsibilities
- Funding – locating financial sources including government loans, venture capital or grants that can help you get started
- Marketing – identifying target audience for your product/service and developing outreach initiatives (advertising, branding, press coverage, etc.) to promote your idea
- Evaluation – establishing a routine method for measuring business outcomes and adjusting objectives

Entrepreneurial Mentors and Resources

Mentors:

It is helpful to seek out entrepreneurial mentors to determine how they accomplished success in their own businesses. Interview a mentor to develop a deeper understanding of what it takes to start and build a business.

Interview questions should cover the following:

- o History – What experience, education and path led to current position?
- o Idea – Where did the business idea originate?
- o Resources – How much money did it require to get started? How did you get the money?
- o Customer – Who is the customer? How did you get your first customer(s)?
- o Challenges – What were your biggest challenges? How did you overcome them?
- o Future – What are your goals for the future?
- o Networking – Are there are other people you know who may be interested in talking to me about how they got started in their own business?

Resources:

Entrepreneurs should take advantage of the many resources available for new businesses.

- The following provides a resource center for business tools, forms, advice, news:
<http://www.entrepreneur.com/resourcecenter/index.html>
- The following provides a resource center for rules, regulations and legal considerations of starting a business:
<http://www.irs.gov/businesses/small/content/0,,id=98864,00.html>