#### Quarterly Theme: How do we contribute to a healthy community?

5th Grade Essential Question: How can rain gardens impact our global water supply?

#### **Standards of Learning:**

#### Standard 1:

#### **Ecological, Social, and Economic Systems**

Students develop knowledge of the interconnections and interdependency of ecological, social, and economic systems. They demonstrate understanding of how the health of these systems determines the sustainability of natural and human communities at local, regional, national, and global levels.

#### Standard 2:

#### The Natural and Built Environment

Students engage in inquiry and systems thinking and use information gained through learning experiences in, about, and for the environment to understand the structure, components, and processes of natural and human-built environments.

#### Standard 3:

#### Sustainability and Civic Responsibility

Students develop and apply the knowledge, perspective, vision, skills, and habits of mind necessary to make personal and collective decisions and take actions that promote sustainability.

#### **Related Environmental Objectives:**

The student will:

• Describe the environmental changes that have occurred in their community.

#### **Related Integrated Activities:**

<u>PLT -40 Then and Now:</u> The student will determine the quality and quantity of resources and their use or misuse by humans and how they affect the standard of living.

- Do-it-yourself greenhouse
- Energy from the sun
- Maintaining the balance
- Energy transporter
- Puddle-o-meter
- Power plants
- Photosynthesis game
- Energy from water power
- Energy from wind power
- Timepieces

http://unesdoc.unesco.org/images/0009/000963/096345eo.pdf

## SCIENCE SCIENCE

#### Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Question: How can rain gardens impact our global water supply?

#### **Standards of Learning:**

### 5.4 The student will investigate and understand that matter is anything that has mass and takes up space; and occurs as a solid, liquid, or gas. Key concepts include

- a) distinguishing properties of each phase of matter;
- b) the effect of temperature on the phases of matter;
- c) atoms and elements;
- d) molecules and compounds; and
- e) mixtures including solutions.

#### ON GOING

5.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations

#### **SOL REVIEW**

#### **Related Integrated Activities**

- Custard Tectonics
- Hot and Cold
- Acid Drops
- Ozone Game
- Ozone Holes

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# SOCIAL STUDIES

#### Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Question: How did industrial technology revolutionize the world?

#### **Standards of Learning:**

#### USI.1 The student will demonstrate skills for historical and geographical analysis and responsible citizenship, including the ability to

- identify and interpret primary and secondary source documents to increase understanding of events and life in United States history to 1865;
- b) make connections between the past and the present;
- sequence events in United States history from pre-Columbian times to 1865;
- d) interpret ideas and events from different historical perspectives;
- e) evaluate and discuss issues orally and in writing;
- f) analyze and interpret maps to explain relationships among landforms, water features, climatic characteristics, and historical events;
- g) distinguish between parallels of latitude and meridians of longitude;
- h) interpret patriotic slogans and excerpts from notable speeches and documents;
- identify the costs and benefits of specific choices made, including the consequences, both intended and unintended, of the decisions and how people and nations responded to positive and negative incentives.

#### USI.8 The student will demonstrate knowledge of westward expansion and reform in America from 1801 to 1861 by

- a) describing territorial expansion and how it affected the political map of the United States, with emphasis on the Louisiana Purchase, the Lewis and Clark expedition, and the acquisitions of Florida, Texas, Oregon, and California;
- b) identifying the geographic and economic factors that influenced the westward movement of settlers;
- describing the impact of inventions, including the cotton gin, the reaper, the steamboat, and the steam locomotive, on life in America;
- d) identifying the main ideas of the abolitionist and women's suffrage movements.

#### USI.9 The student will demonstrate knowledge of the causes, major events, and effects of the Civil War by

- a) describing the cultural, economic, and constitutional issues that divided the nation:
- explaining how the issues of states' rights and slavery increased sectional tensions;
- c) identifying on a map the states that seceded from the Union and those that remained in the Union;
- d) describing the roles of Abraham Lincoln, Jefferson Davis, Ulysses S. Grant, Robert E. Lee, Thomas "Stonewall" Jackson, and Frederick Douglass in events leading to and during the war;
- e) using maps to explain critical developments in the war, including major battles;
- f) describing the effects of war from the perspectives of Union and Confederate soldiers (including African American soldiers), women, and enslaved African Americans.

#### **Related Integrated Activities:**

- Mini Wetlands
- All Change
- Useful Plants
- Food Webbing
- Picture with Plants
- Flowers and Dancing Bees

http://unesdoc.unesco.org/images/0009/000963/096345eo.pdf

# READING

Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Question: How can rain gardens impact our global water supply?

#### **Standards of Learning:**

### 5.7 The student will demonstrate comprehension of information from a variety of print resources. a) Develop notes that include important concepts, summaries, and identification of information sources.

b) Organize information on charts, maps, and graphs.

#### ON GOING

- 5.1 The student will listen, draw conclusions, and share responses in subject-related group learning activities.
  - a) Participate in and contribute to discussions across content areas.
  - b) Organize information to present reports of group activities.
  - c) Summarize information gathered in group activities.
- 5.2 The student will use effective nonverbal communication skills.
  - a) Maintain eye contact with listeners.
  - b) Use gestures to support, accentuate, and dramatize verbal message.
  - c) Use facial expressions to support and dramatize verbal message.
  - d) Use posture appropriate for communication setting.
- 5.4 The student will read fiction and nonfiction with fluency and accuracy.
  - a) Use context to clarify meaning of unfamiliar words.
  - b) Use knowledge of root words, prefixes, and suffixes.
  - c) Use dictionary, glossary, thesaurus, and other word-reference materials.

#### **Anchor Text Bibliography:**

It's Raining Fish and Spiders Bill Evans

Let's Review Global History and Geography Mark Willner

Food for Today, Student Edition Helen Kowtaluk, McGraw-Hill

• Use this language arts and math activity to practice writing across the curriculum. Working independently to create math problems based on the novel *Brian's Winter*, young readers create a five-problem math worksheet that will be shared with their classmates with Microsoft Word. The activity addresses several research standards, including evaluating validity of information and identifying conflicting information.

#### **SOL REVIEW**

#### Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Question: How can rain gardens impact our global water supply?

#### **Standards of Learning:**

# WRITING

- The student will write for a variety of purposes: to describe, to 5.8 inform, to entertain, and to explain.
  - a) Choose planning strategies for various writing purposes.
  - b) Organize information.
  - c) Demonstrate awareness of intended audience.
  - d) Use precise and descriptive vocabulary to create tone and voice.
  - e) Vary sentence structure.
  - f) Revise writing for clarity.
  - Use available technology to access information.
- The student will edit writing for correct grammar, capitalization, 5.9 spelling, punctuation, and sentence structure.
  - a) Use plural possessives.
  - b) Use adjective and adverb comparisons.
  - c) Identify and use interjections.
  - d) Use apostrophes in contractions and possessives.
  - e) Use quotation marks with dialogue.
  - f) Use commas to indicate interrupters and in the salutation and closing of a letter.
  - g) Use a hyphen to divide words at the end of a line.
  - h) Edit for clausal fragments, run-on sentences, and excessive coordination.

#### **Related Integrated Activities:**

The students will:

- Students practice reading and writing skills through a variety of winter themed activities. In this beginning reading instructional activity, students hear winter themed stories and practice concepts of print, phonemic awareness, alphabet and writing. Students sing winter songs, make cold foods, and participate in dramatic play.
- Students employ poetry as a medium to relay information and express views about significant environmental issues that exist today and to assess their effects on The State of the Planet as we enter the next millennium.

#### Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Ouestion: How can rain gardens impact our global water supply?

#### Standards of Learning:

- The student will describe the relationship found in a number 5.17 pattern and express the relationship.
- 5.18 The student will
  - a) investigate and describe the concept of variable:
  - b) write an open sentence to represent a given mathematical relationship, using a variable;
  - c) model one-step linear equations in one variable, using addition and subtraction; and
  - d) create a problem situation based on a given open sentence, using a single variable.

#### ON GOING

- 5.8 The student will
  - a) find perimeter, area, and volume in standard units of measure:
  - b) differentiate among perimeter, area, and volume and identify whether the application of the concept of perimeter, area, or volume is appropriate for a given situation:
  - c) identify equivalent measurements within the metric system:
  - d) estimate and then measure to solve problems, using U.S. Customary and metric units; and
  - e) choose an appropriate unit of measure for a given situation involving measurement using U.S. Customary and metric units.
- 5.10 The student will determine an amount of elapsed time in hours and minutes within a 24-hour period.

#### **Related Integrated Activities:**

Impact on the environment through the use of cars, buses, trucks, planes, and more.

- **How Gasoline Works**
- **Pollution Prevention**
- Green Cars

Impact on the environment based on what kids eat.

- **Bio Foods**
- Filter It Down Water
- Food Web
- Students investigate water runoff components. In this environmental science instructional activity, students classify pollutants as non-source or point source. They collect and graph experimental data.

#### Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Question: How can rain gardens impact our global water supply?

#### Standards of Learning:



<b>5.</b> 7	art that characterizes a historical time period.	
	art that characterizes a historical time period.	Related

- 5.8 The student will defend a position regarding a historical or contemporary issue through the production of a work of art.
- 5.9 The student will demonstrate an understanding of symbolic meanings by incorporating symbols in a work of art.
- 5.21 The student will identify and discuss how American historical events influenced works of art, with emphases on westward expansion and the Civil War.

#### Related Integrated Activities:

#### The students will:

- Create their own environmental art after the teacher shows them a variety of example and has a discussion about it. They then write an initial personal definition of environmental art.
- Create an idea for environmental artwork for installation somewhere on school property.

#### Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Question: How can rain gardens impact our global water supply?

#### **Standards of Learning:**

# MUSIC

- The student will sing a repertoire of songs in tune with a clear 5.1 tone quality.
  - 1. Demonstrate beginning choral behaviors and skills in group singing.
  - 2. Participate in group singing involving two-part or threepart harmony.
  - 3. Develop age-appropriate ability in singing skills.
- The student will notate and perform rhythmic patterns that 5.2 include sixteenth notes, a dotted eighth followed by a sixteenth note, single eighth notes, eighth rests, paired eighth notes, quarter notes, quarter rests, half notes, half rests, dotted half notes, whole notes, and whole rests, using body percussion, voice, pitched instruments, or non-pitched instruments.
- The student will notate and perform melodies from the treble 5.3 staff, using traditional notation.
  - 1. Use voice or instruments.
  - 2. Use computer technology.
- The student will respond to music with movement. 5.4
  - 1. Perform choreographed and non-choreographed movements.
  - 2. Perform dances and games from various cultures, including traditional folk dances.
  - 3. Use body percussion.

#### **Related Integrated Activities:**

#### Little Ways and Big Ways of Engaging with Nature:

Find little ways to learn about nature and explore them regularly e.g., visiting a special place, looking after an animal, a meditative walk, tending a garden. Then gradually engage in deeper, longer, nature-based activities e.g., vision quest, switching to solar power.

#### **Natural Orchestra:**

Create a musical performance using only natural materials.

Quarterly Theme: How do we contribute to a healthy community? 5<sup>th</sup> Grade Essential Question: How can rain gardens impact our global water supply?

#### **Standards of Learning:**

### 5.4 The student will critically evaluate how print media, broadcast media, and Internet technology influence perceptions of health information, products, and services. Key concepts/skills include

- a) strategies for validating health information; tools for the critical evaluation of advertisements and promotions.
- 5.5 The student will explain how peers, families, and community groups work together to build a healthy community. Key concepts/skills include
  - b) collaborative support for environmental issues; the existence of customs and traditions; promotion of the value of community health and wellness; examination of community health issues; development of community health projects; promotion of volunteerism and community service.

#### **Related Integrated Activities:**

#### The students will:

- Students investigate writing that we read daily by analyzing advertisements and articles. In this language arts lesson, students discuss the images and writing they see daily, where it comes from, and what it represents. Students explore games that can enhance their reading abilities such as reading bumper stickers or playing "I Spy."
- •

#### **INSTRUCTIONAL ELEMENTS**

Key Vocabulary	Instructional Strategies	Instructional Materials	Technology
Atoms Protons Neutrons Electrons Elements Mixtures Solutions Compounds Molecules Substance Slavery Agricultural society Manufacturing society Regions Civil war Favored tariffs Opposed tariffs Seceded	<ul> <li>Integrating content into</li> <li>Language Arts activities</li> <li>Author/Illustrator studies</li> <li>Book talks</li> <li>Web-based inquiry</li> <li>Experiential learning (projectbased)</li> <li>Direct instruction</li> <li>Small group work</li> <li>Reflective discussions</li> <li>Comparing/contrasting</li> <li>Peer partner learning</li> <li>Field Trips</li> <li>Museum of the Confederacy</li> </ul>	<ul> <li>Websites referenced in VDOE</li> <li>Natural materials from Forest</li> <li>Hill Park</li> <li>Related texts</li> <li>Assessment resources</li> <li>Graphic organizers</li> <li>Project Learning Tree guide</li> <li>Computers</li> <li>Digital Cameras</li> <li>City, state, region, and country maps.</li> <li>Journals</li> <li>Charts and Graphs</li> <li>LCD Projector</li> <li>Crayons, markers, paints</li> <li>Rulers</li> <li>White boards and markers</li> <li>Sorts</li> <li>Index cards</li> <li>stick notes</li> <li>reusable materials</li> </ul>	<ul> <li>Web resources</li> <li>United Streaming</li> <li>Powerpoint</li> <li>Publisher</li> <li>Word</li> <li>Evernote</li> <li>Wikis</li> <li>Audacity</li> <li>Webquest</li> <li>Blogspots</li> </ul>

#### **INQUIRY PROJECT & CULMINATING ACTIVITY**

#### Goal:

The 5th grade class will work together to research significant contributors to Science, History and Mathematicians then plan and execute a wax museum.

#### **Elements:**

#### TLW:

- A. Read and research about a specific person
- B. Develop and play review games of concepts learned
- C. Create timelines
- D. Appropriately conduct internet research

#### **Pacing:**

This project will be executed in 9 weeks. In-class work will be completed during the inquiry block. Component pieces may be executed as home-based projects at the discretion of the classroom teacher.

#### **Evaluation and Assessment:**

Component pieces will be evaluated with assignment specific, standards related rubric. Scores for each standard will be entered into Kickboard and averaged as part of the quarterly student mastery grade. An SOL-aligned teacher-created rubric will assess the culminating activity.

ENVIRONMENT					
Driving Objectives: Essential Understanding: Essential Skills: Essential Questions:					
Standard 1: Ecological, Social, and Economic Systems Students develop knowledge of the interconnections and interdependency of ecological, social, and economic systems. They demonstrate understanding of how the health of these systems determines the sustainability of natural and human communities at local, regional, national, and global levels.	The United States has 749 million acres of forestland that make up about one-third of the total land base. Canada has 1,032 million acres. To be classified as forestland, the area must be at least one acre and contain about 10 percent tree cover. PLT -32- A Forest of Many Uses.	Classifying and Categorizing; Analyzing; Discussing; Evaluating	<ul> <li>How do people use forest resources?</li> <li>How is the forest managed to satisfy human and environmental needs?</li> </ul>		
Standard 2: The Natural and Built Environment Students engage in inquiry and systems thinking and use information gained through learning experiences in, about, and for the environment to understand the structure, components, and processes of natural and human- built environments.	Forestry is more than just planting trees and fighting forest fires, although those tasks may be part of a professional forester's responsibilities.  In nature, forest ecosystems are controlled by sunlight, rain, and soil fertility. Windstorms, insect infestation, tree disease, and lightning also have a role in regulating forest ecosystems. PLT-34	Identifying Attributes and Components; Representing	What jobs or careers are directly related to forest resources?		
Standard 3: Sustainability and Civic Responsibility Students develop and apply the knowledge, perspective, vision, skills, and habits of mind necessary to make personal and collective decisions and take actions that promote sustainability.	Our society depends on forests for timber and other forest products, as well as for wildlife, clean air, water and beauty. PLT – 34- Who Works in this Forest.	Formulating Questions; Discussing	How does the community work together to care for the forest?		

SCIENCE				
Driving Objectives: Essential Understanding: 1		<b>Essential Skills:</b>	<b>Essential Questions:</b>	
5.1 On-Going  5.4 The student will investigate and understand that matter is anything that has mass and takes up space; and occurs as a solid, liquid, or gas. Key concepts include  a) distinguishing properties of each phase of matter; b) the effect of temperature on the phases of matter; c) atoms and elements; d) molecules and compounds; and e) mixtures including solutions.	<ul> <li>Matter is anything that has mass and volume.</li> <li>Mass is the amount of matter in an object. The mass of an object does not change. (Weight of an object changes based on the gravitational pull on it. A person will have the same mass on Earth, Mars, and our moon. However, his or her weight on our moon will be 1/6 of what it is on Earth and will be 1/3 as much on Mars.)</li> <li>Matter can exist in several distinct forms which are called phases. The three basic phases of matter generally found on Earth are gas, liquid, and solid. (Though other phases of matter have been identified, these are the phases of matter that fifthgrade students are expected to know.)</li> <li>As its temperature increases, many kinds of matter change from a solid to a liquid to a gas. As its temperature decreases, that matter changes from a gas to a liquid to a solid.</li> <li>All matter, regardless of its size, shape, or color, is made of particles (atoms and molecules) that are too small to be seen by the unaided eye.</li> <li>There are more than 100 known elements that make up all matter. A few of the more familiar elements include: hydrogen (H), oxygen (O), helium (He), carbon (C), sodium (Na), and potassium (K). The smallest part of an element is an atom.</li> <li>A mixture is a combination of two or more substances that do not lose their</li> </ul>	<ul> <li>Construct and interpret a sequence of models (diagrams) showing the activity of molecules in all three basic phases of matter.</li> <li>Construct and interpret models of atoms and molecules.</li> <li>Identify substances as being an element or a compound.</li> <li>Design an investigation to determine how a change in temperature affects the phases of matter (e.g., water). Include in the design ways information will be recorded, what measures will be made, what instruments will be used, and ways the data will be graphed.</li> <li>Compare and contrast mixtures and solutions.</li> </ul>	How does matter relates to our environment?  What are some contributions of physicists to science?  What solutions and mixtures are naturally found in nature?  What the most common elements found in our surroundings?	

identifying characteristics when	
combined. A solution is a mixture in	
which one substance dissolves in another.	
When two or more elements combine to	
form a new substance, it is called a	
compound. There are many different	
types of compounds because atoms of	
elements combine in many different ways	
(and in different whole number ratios) to	
form different compounds. Examples	
include water (H <sub>2</sub> O) and table salt (NaCl).	
The smallest part of a compound is a	
molecule.	

	SOCIAL STUDIES			
Driv	ing Objectives:	Essential Understanding:	<b>Essential Skills:</b>	<b>Essential Questions:</b>
USI.9	The student will demonstrate knowledge of the causes, major events, and effects of the Civil War by  a) describing the cultural, economic, and constitutional issues that divided the nation;  b) explaining how the issues of states' rights and slavery increased sectional tensions;  c) identifying on a map the states that seceded from the Union and those that remained in the Union;  d) describing the roles of Abraham Lincoln, Jefferson Davis, Ulysses S. Grant, Robert E. Lee, Thomas "Stonewall" Jackson, and Frederick Douglass in events leading to and during the war;  e) using maps to explain critical developments in the war, including major battles;  f) describing the effects of war from the perspectives of Union and Confederate soldiers (including African American soldiers), women, and enslaved African Americans.	<ul> <li>Cultural, economic, and constitutional differences between the North and the South eventually resulted in the Civil War.</li> <li>The South feared that the North would take control of Congress, and Southerners began to proclaim states' rights as a means of self-protection.</li> <li>The North believed that the nation was a union that could not be divided.</li> <li>While the Civil War did not begin as a war to abolish slavery, issues surrounding slavery deeply divided the nation.</li> <li>Southern states that were dependent upon labor-intensive cash crops seceded from the Union. Northernmost slave states (border states) and free states stayed in the Union</li> <li>Lincoln and Lee were men who represented views of the nature of the United States that were very different; such views led to an unavoidable conflict.</li> <li>Location and topography were critical elements influencing important developments in the Civil War, including major battles.</li> <li>Life on the battlefield and on the home front was extremely harsh. Many soldiers died from disease and exposure.</li> </ul>	<ul> <li>Make connections between the past and the present.</li> <li>Sequence events in United States history.</li> <li>Interpret ideas and events from different historical perspectives.</li> <li>Interpret patriotic slogans</li> <li>Analyze and interpret maps to explain historical events.</li> <li>Analyze and interpret maps to explain relationships among landforms, water features, climatic characteristics, and historical events.</li> <li>Interpret excerpts from notable documents.</li> </ul>	What hardships were experienced during the Civil War?  How did the Civil War change the lives of soldiers, women, and slaves?  Where did critical events of the Civil War take place?  Where were the major battles fought?  What are the ways location and topography influence important developments in the war, including major battles?  Who are considered leaders of the Civil War?  How did Lincoln's view of the nature of the Union differ from Lee's? Which states seceded from the Union?  Which four slave states stayed in the Union?  Where were the other states that remained in the Union located?  How did the issues of states' rights and slavery increase sectional tension between the North and South?

USI.8 The student will demonstrate knowledge of westward expansion and reform in America from 1801 to 1861 by

- from 1801 to 1861 by
  a) describing
  territorial expansion and
  how it affected the
  political map of the
  United States, with
  emphasis on the
  Louisiana Purchase, the
  Lewis and Clark
  expedition, and the
  acquisitions of Florida,
  Texas, Oregon, and
  California;
- b) identifying the geographic and economic factors that influenced the westward movement of settlers:
- c) describing the impact of inventions, including the cotton gin, the reaper, the steamboat, and the steam locomotive, on life in America;
- d) identifying the main ideas of the abolitionist and women's suffrage movements.

Between 1801 and 1861, exploration was encouraged as America underwent vast territorial expansion and settlement.

Westward migration was influenced by geography and economic opportunity.

Prior to the Civil War, most industrialization in America was in the North; however, the equipment produced in the North had an impact on the farming society of the South.

The abolitionists worked to end slavery.

The women's suffrage movement helped women gain equal rights.

#### New territories added to the United States after 1801

- Louisiana Purchase
  - Jefferson bought land from France (the Louisiana Purchase), which doubled the size of the United States.
  - In the Lewis and Clark expedition, Meriwether Lewis and William Clark explored the Louisiana Purchase and the Oregon Territory from the Mississippi River to the Pacific Ocean.
- Florida
  - Spain gave Florida to the United States through a treaty.
- Texas
  - Texas was added to the United States after it became an independent republic.
- Oregon
  - The Oregon Territory was divided by the United States and Great Britain.
- California
- War with Mexico resulted in California and the southwest territory becoming part of the United States.

#### Geographic and economic factors that influenced westward movement

- Population growth in the eastern states
- Availability of cheap, fertile land
- Economic opportunity, e.g., gold (California Gold Rush), logging, farming, freedom (for runaway slaves)
- Cheaper and faster transportation, e.g., rivers and canals (Erie Canal), steamboats
- Knowledge of overland trails (Oregon

What new territories became part of the United States between 1801 and 1861?

What factors influenced westward migration?

How did inventions and entrepreneurs affect the lives of Americans?

What were the main ideas expressed by the abolitionists?

What were the main ideas expressed during the women's suffrage movement?

and Santa Fe) Belief in the right of "Manifest Destiny"— the idea that expansion was for the good of the country and was the right of the country
Make connections between the past and the present. (USI.1b)
Make connections between the past and the present. (USI.1b)
Make connections between the past and the present. (USI.1b)
Interpret ideas and events from different historical perspectives. (USI.1d)
Analyze and interpret maps to explain relationships among landforms, water features, climatic characteristics, and historical events. (USI.1f)Interpret ideas and events from different historical perspectives. (USI.1d)
Analyze and interpret maps to explain relationships among landforms, water features, climatic characteristics, and historical events. (USI.1f) Make connections between the past and the present. (USI.1b)
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Analyze and interpret maps to explain  Page 17 of 23

relationships among landforms, water
features, climatic characteristics, and
historical events. (USI.1f)
Abolitionist movement
Most abolitionists demanded immediate
freeing of the slaves.
Abolitionists believed that slavery was wrong.
<ul> <li>Morally wrong</li> </ul>
<ul> <li>Cruel and inhumane</li> </ul>
<ul> <li>A violation of the principles of democracy</li> </ul>
Abolitionist leaders included both men and
women.
Harriet Tubman led hundreds of enslaved
African Americans to freedom along the
Underground Railroad.
William Lloyd Garrison wrote the
Liberator newspaper and worked for the
immediate emancipation of all enslaved African Americans.
- Frederick Douglass wrote the <i>North Star</i>
newspaper and worked for rights for
African Americans and women to better
their lives.
Women's suffrage movement
Supporters declared that "All men and women
are created equal."
Supporters believed that women were
deprived of basic rights:
<ul> <li>Denied the right to vote</li> </ul>
<ul> <li>Denied educational opportunities,</li> </ul>
especially higher education
<ul> <li>Denied equal opportunities in business</li> </ul>
<ul> <li>Limited in the right to own property</li> </ul>
• The movement was led by strong women who
began their campaign before the Civil War
and continued after the war had ended.
- Isabella (Sojourner) Truth, a former
enslaved African American, was a
nationally known advocate for equality
and justice.
<ul> <li>Susan B. Anthony was an advocate to gain</li> </ul>
voting rights for women and equal rights
for all.
Elizabeth Cady Stanton played a leadership
role in the women's rights movement.

Driving Objectives:	<b>Essential Understanding:</b>	Essential Skills:	<b>Essential Questions:</b>	
The student will  a) find perimeter, area, and volume in standard units of measure;  b) differentiate among perimeter, area, and volume and identify whether the application of the concept of perimeter, area, or volume is appropriate for a given situation;  c) identify equivalent measurements within the metric system;  d) estimate and then measure to solve problems, using U.S. Customary and metric units; and  e) choose an appropriate unit of measure for a given situation involving measurement using U.S. Customary and metric units.	<ul> <li>Understand the concepts of perimeter, area, and volume.</li> <li>Understand and use appropriate units of measure for perimeter, area, and volume.</li> <li>Understand the difference between using perimeter, area, and volume in a given situation.</li> <li>Understand how to select a measuring device and unit of measure to solve problems involving measurement.</li> <li>Solve problems involving measurement by selecting an appropriate measuring device and a U.S. Customary or metric unit of measure for the following:</li> <li>length: part of an inch (1/2, 1/4, 1/8), inches, feet, yards, millimeters, centimeters, meters, and kilometers;</li> <li>weight: ounces, pounds, and tons;</li> <li>mass: grams and kilograms;</li> <li>liquid volume: cups, pints, quarts, gallons, milliliters, and liters;</li> <li>area: square units; and</li> </ul>	The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to  • Determine the perimeter of a polygon, with or without diagrams, when  • the lengths of all sides of a polygon that is not a rectangle or a square are given;  • the length and width of a rectangle are given; or  • the length of a side of a square is given.  • Estimate and determine the perimeter of a polygon, and area of a square, rectangle, and right triangle following the parameters listed above, using only whole number measurements given in metric or U.S. Customary units, and record the solution with the appropriate unit of measure (e.g., 24 square inches).  • Estimate and determine the area of a square, with or without diagrams, when the length of a side is given.  • Estimate and determine the area	What is the difference between perimeter, area, and volume?	

<ul><li>temperature: Celsius Fahrenheit units.</li><li>Water freezes at o°C</li></ul>	nd 32°F. diagrar	tangle, with or without ns, when the length and are given.	
<ul> <li>Water boils at 100°C</li> <li>Normal body temper about 37°C and 98.6°F.</li> </ul>	iture is of a rig	te and determine the area ht triangle, with or t diagrams, when the nd the height are given.	
		ntiate among the ts of area, perimeter, and	
		p a procedure for finding using manipulatives lbes).	
	• Determunits.	nine volume in standard	
	where a volume measur	pe practical situations area, perimeter, and are appropriate res to use, and justify noices orally or in writing.	
	of the carea, or	y whether the application oncept of perimeter, volume is appropriate ven situation.	
	measur system > length: meters > mass: g	y equivalent rements within the metric for the following: millimeters, centimeters, and kilometers; grams and kilograms; volume: milliliters, and	

5.18	The student will		
	a) investigate and		
	describe the concept of		
	variable;		
	b) write an open		
	sentence to represent a		
	given mathematical		
	relationship, using a		
	variable;		
	c) model one-step linear		
	equations in one variable,		
	using addition and		
	subtraction; and		
	d) create a problem		
	situation based on a given		

open sentence, using a

single variable.

**On-Going** 

5.10

- All students should
- Understand that a variable is a symbol that can stand for an unknown number or object.
- Understand that a variable expression is a variable or combination of variables, numbers, and symbols that represents a mathematical relationship.
- Understand that verbal expressions can be translated to variable expressions.
- Understand that an open sentence has a variable and an equal sign (=).
- Understand that problem situations can be expressed as open sentences.

- The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to
- Describe the concept of a variable (presented as boxes, letters, or other symbols) as a representation of an unknown quantity.
- Write an open sentence with addition, subtraction, multiplication, or division, using a variable to represent a missing number.
- Model one-step linear equations using a variety of concrete materials such as colored chips on an equation mat or weights on a balance scale.
- Create and write a word problem to match a given open sentence with a single variable and one operation.