

# 4<sup>th</sup> Grade Pacing Guide

<b>Math – 1<sup>st</sup> 6 Weeks</b>	<b>Suggested Activities:</b>
0406.1.1 Understand the relationship between use of answers and the accuracy of the number.	See lists of websites from Sullivan County Schools – (next page) <a href="http://www.sullivan12.net/public/curriculum/elementary.html">http://www.sullivan12.net/public/curriculum/elementary.html</a>
0406.1.2 Identify the range of appropriate estimates, including over-estimate and under-estimate.	
0406.1.3 Connect operations with decimals to money and make estimates	
<b>SPI 0406.1.3 Determine the correct change from a transaction.</b>	
0406.1.4 Use commutative, associative, and distributive properties of numbers including oral descriptions of mathematical reasoning.	
<b>SPI 0406.1.1 Verify a conclusion using the commutative, associative and distributive properties</b>	
0406.1.8 Match the spoken, written, concrete (including base ten blocks), and pictorial representations of decimals.	
<b>SPI 0406.1.2 Compare decimals using concrete and pictorial representations.</b>	
0406.1.10 Use age-appropriate books, stories, and videos to convey ideas of mathematics	
0406.2.1 Compose and decompose quantities according to place value.	
0406.2.2 Understand decimal notation as an extension of the base-ten number system.	
<b>SPI 0406.2.1 Read and write numbers from hundredths to hundred-thousands in numerals and in words.</b>	
<b>SPI 0406.2.3 Identify the place value of a specified digit in a number and the quantity it represents.</b>	
<b>SPI 0406.2.9 Add and subtract decimals through hundredths.</b>	
0406.3.2 Translate between symbols and words to represent quantities in expressions or equations.	

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<b>Math – 2<sup>nd</sup> 6 Weeks</b>	<b>Suggested Activities:</b>
0406.2.7 Identify factors of whole numbers and model factors and products beyond basic multiplication facts using arrays and area models.	See lists of websites from Sullivan County Schools – (next page) <a href="http://www.sullivank12.net/public/curriculum/elementary.html">http://www.sullivank12.net/public/curriculum/elementary.html</a>
<b>SPI 0406.2.4 Find factors, common factors, multiples, and common multiples of two numbers.</b>	
0406.2.3 Multiply two- and three-digit whole numbers.	
<b>SPI 0406.2.11 Solve problems using whole number multi-digit multiplication.</b>	
0406.1.4 Use commutative, associative, and distributive properties of numbers including oral descriptions of mathematical reasoning.	
<b>SPI 0406.3.2 Make generalizations about geometric and numeric patterns</b>	
0406.3.1 Find an unknown quantity in simple equations using whole numbers, fractions, decimals, and mixed numbers.	
<b>SPI 0406.4.2 Graph and interpret points with whole number or letter coordinates on grids or in the first quadrant of the coordinate plane.</b>	
<b>SPI 0406.4.3 Construct geometric figures with vertices at points on a coordinate grid.</b>	

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<b>Math – 3<sup>rd</sup> 6 weeks</b>	<b>Suggested Activities:</b>
0406.2.10 Use models to understand division as the inverse of multiplication, partitioning, and repeated subtraction.	See lists of websites from Sullivan County Schools – (next page) <a href="http://www.sullivan12.net/public/curriculum/elementary.html">http://www.sullivan12.net/public/curriculum/elementary.html</a>
0406.2.5 Understand that division by zero is undefined.	
0406.2.4 Understand and use a reliable algorithm for multiplying multi-digit numbers and dividing numbers by a single-digit divisor accurately and efficiently.	
0406.2.6 Divide three-digit whole numbers by one-digit divisors fluently with pencil and paper.	
<b>SPI 0406.2.12 Solve problems using whole number division with one- or two-digit divisors.</b>	
0406.2.14 Understand the role of the remainder in division.	
0406.3.4 Translate between symbolic, numerical, verbal, or pictorial representations of a whole number pattern or relationship.	
<b>SPI 0406.4.8 Convert measurements within a single system that are common in daily life (e.g. hours and minutes)</b>	
0406.5.1 Create and label appropriate scales for graphs.	
0406.5.2 Evaluate how well various representations show the collected data.	
<b>SPI 0406.5.1 Depict data using various representations (e.g., tables, pictographs, line graphs, bar graphs).</b>	
0406.5.5 Use measures of central tendency to compare two sets of related data.	
<b>SPI 0406.5.2 Solve problems using estimation and comparison within a single set of data.</b>	
<b>SPI 0406.5.3 Given a set of data or a graph, describe the distribution of the data using median, range, or mode.</b>	

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0406.2.8 Generate equivalent forms of whole numbers, decimals, and common fractions (e.g., $1/10$ , $1/4$ , $1/2$ , $3/4$ ).	
<b>SPI 0406.3.1 Use letters and symbols to represent an unknown quantity and write a simple mathematical expression.</b>	

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<b>Math – 4<sup>th</sup> 6 Weeks</b>	<b>Suggested Activities:</b>
<b>0406.2.9</b> Compare equivalent forms whole numbers, fractions, and decimals to each other and to benchmark numbers	
<b>SPI 0406.2.6</b> Use the symbols $<$ , $>$ and $=$ to compare common fractions and decimals in both increasing and decreasing order.	
<b>0406.2.11</b> Use models, benchmarks, and equivalent forms to compare fractions/decimals and locate them on the number line.	
<b>SPI 0406.2.2</b> Locate and place mixed numbers on the number line.	
<b>0406.2.12</b> Understand and use decimal numbers up to hundredths and write them as fractions	
<b>SPI 0406.2.5</b> Generate equivalent forms of common fractions and decimals and use them to compare size.	
<b>SPI 0406.2.7</b> Convert improper fractions into mixed numbers and/or decimals.	
<b>0406.2.13</b> Solve multi-step problems of various types using whole numbers, fractions, and decimals.	
<b>SPI 0406.2.10</b> Solve contextual problems using whole numbers, fractions, and decimals.	
<b>SPI 0406.2.8</b> Add and subtract proper fractions with like and unlike denominators and simplify the answer.	
<b>0406.5.6</b> Determine a simple probability.	
<b>0406.5.7</b> Express a probability pictorially.	

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<b>Math 5<sup>th</sup> 6 Weeks</b>	<b>Suggested Activiites:</b>
<b>0406.1.5</b> Measure using ruler, meter stick, clock, thermometer, or other scaled instruments	
<b>0406.1.6</b> Identify geometric or physical attributes that are appropriate to measure in a given situation.	
<b>0406.4.1</b> Identify the basic parts of circles.	
<b>0406.4.2</b> Understand the definition of degree as it relates to the circle.	
<b>0406.4.3</b> Classify angles and triangles as obtuse, acute, or right.	
<b>0406.4.4</b> Measure and draw angles	
<b>SPI 0406.4.1</b> Classify lines and line segments as parallel, perpendicular, or intersecting	
<b>SPI 0406.4.4</b> Identify acute, obtuse, and right angles in 2-dimensional shapes.	
<b>0406.4.5</b> Determine if a figure is a polygon.	
<b>0406.4.6</b> Recognize the use of decimals in metric measures.	
<b>0406.4.7</b> Measure liquids using both standard units and metric units	
<b>SPI 0406.4.6</b> Determine situations in which a highly accurate measurement is important.	
<b>SPI 0406.4.7</b> Determine appropriate size of unit of measurement in problem situations involving length, capacity or weight.	
<b>SPI 0406.4.8</b> Convert measurements within a single system that are common in daily life (e.g., hours and minutes, inches and feet, centimeters and meters, quarts and gallons, liters and milliliters).	
<b>0406.4.8</b> Recognize that a measure of area represents the total number of same-sized units /that cover the shape without gaps or overlaps.	
<b>0406.4.9</b> Recognize that area does not change when 2-dimensional figures are cut apart and rearranged.	

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<b>SPI 0406.4.5</b> Identify attributes of simple and compound figures composed of 2- and 3- dimensional shapes.		
<b>0406.4.10</b> Connect area measure to multiplication using a rectangular area model.		
<b>0406.4.11</b> Estimate areas of rectangles in square inches and square centimeters		
<b>0406.4.12</b> Estimate the size of an object with respect to a given measurement attribute (length, perimeter, area, or capacity).		
<b>0406.4.13</b> Compare objects with respect to a given attribute such as length, area, and capacity		
<b>SPI 0406.4.9</b> Solve problems involving area and/or perimeter of rectangular figures.		
<b>0406.4.16</b> Examine transformations in the coordinate plane.		
<b>0406.4.17</b> Predict the results of a transformation of a geometric shape.		
<b>SPI 0406.4.10</b> Identify images resulting from reflections, translations, or rotations.		
<b>0406.4.18</b> Determine whether a geometric shape has line and/or rotational symmetry.		
<b>0406.4.19</b> Design and analyze simple tilings and tessellations.		
<b>0406.4.20</b> Draw lines of symmetry in 2-dimensional figures.		
<b>0406.4.21</b> Recognize two-dimensional faces of three-dimensional shapes		

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<b>Math 6<sup>th</sup> 6 Weeks</b> <b>Suggested Activities:</b>	
Equations	
Variables	
Order of operations	
Adding and subtracting larger numbers	
Metric Olympics	

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<p><b><u>Social Studies 1<sup>st</sup> 6 weeks</u></b></p>	<p><b>Suggested activities:</b></p>
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<p>4.3.spi.2. identify and use key geographical features on maps (i.e., mountains, rivers, plains, valleys, forests).</p>	<p>Brain Pop: "Map Skills"</p>
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<p>4.3.spi.5. determine how physical processes shape the United States' features and patterns (i.e. erosion, volcanoes, plate tectonics, flooding).</p>	<p>Bill Nye: Video "Volcanoes" "Earthquakes"</p>
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<p>4.3.spi.6. use latitude and longitude to identify major North American cities on a map (i.e., Boston, Mexico City, Toronto, Charleston, Savannah, Washington DC, Philadelphia, Sante Fe, Los Angeles).</p>	<p>Brain Pop: "Latitude and Longitude"</p>
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<p>4.1.spi.1. identify pre-Colonial Native American groups (i.e., Cherokee, Creek, Chickasaw, Aztec, Mayans, Olmec, Mississippi</p>	<p>B.P.: "American Indians"</p>
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Mound Builders).	
4.1.spi.3 determine how various groups resolve conflict (i.e., school, tribal councils, courts).	
4.1.spi.4 examine how Native American culture changed as a result of contact with European cultures. (i.e. decreased population, spread of disease, increased conflict, loss of territory, increase of trade.)	
4.2.spi.4. recognize the difference between a barter system and a money system.	

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<b>Social Studies 2<sup>nd</sup> 6 weeks</b>	<b>Suggested activities:</b>
4.3.spi.1. identify the routes the explorers of the Americas on a map (i.e., Columbus, Balboa, Pizarro, DeSoto).	BP: "Christopher Columbus" "Conquistadors"
4.4.spi.3. examine how the Mayflower Compact is a symbol of the first United States government.	
4.5.spi.5.determine the reasons for colonial settlement (i.e., religious, economic, individual freedom).	BP: "Thirteen Colonies"
4.2.spi.1. recognize the concept of supply and demand.	BP: "Supply and Demand" Jefferson County: Kids-Supply and Demand
4.1.spi.2. identify cultural groups who inhabited North America in the 17 <sup>th</sup> century (i.e., Puritans, Quakers, Spanish, French).	
4.1.spi.6. read and interpret facts from a historical passage about an early American Spanish mission.	

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<b>Social Studies 3<sup>rd</sup> 6 weeks</b>	<b>Suggested activities:</b>
4.3.spi.3. recognize the reasons settlements are founded on major river systems. (i.e., transportation, manmade boundaries, food and water sources).	
4.3.spi.4. recognize river systems that impacted early American history (i.e., Mississippi, Mystic, Charles, Hudson).	
4.5.spi.6. examine the events that contributed to the outbreak of the American Revolution (i.e. taxation, judicial process, lack of representations, quartering of troops).	BP: "Causes of the American Revolution"
4.6.spi.1. recognize how groups work cooperatively to accomplish goals and encourage change (i.e., American. Revolution, founding of Tennessee, the failure of the Articles of Confederation, colonies).	BP: "Declaration of Independence"
4.5.spi.7. Determine why the United States Constitution was necessary (i.e., no single currency, no judicial branch, no enforcement of laws, small and large states having unequal representation).	
4.5.spi.8. interpret a timeline, graph, or map depicting slave and indentured servants coming from Europe to life in North America.	
4.5.spi.11. interpret a visual contrasting life before and after the American Revolution (i.e., education, family size, transportation, politics).	
4.2.spi.3. identify major industries of Colonial	

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<p>America using a map of the original 13 colonies.</p>	
<p>4.5.spi.4. determine the hardships faced by early Tennessee settlers in the late 1700's (i.e., security, isolated communities, lack of access to goods, natural geography).</p>	

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<b>Social Studies 4<sup>th</sup> 6 weeks</b>	<b>Suggested activities:</b>
4.4.spi.1. identify the 3 branches of federal and state governments.	BP: "Branches of Government"
4.4.spi.2. identify the rights outlined by the Bill of Rights (i.e., Amendments 1,5,6,8).	BP: "Bill of Rights"
4.5.spi.10. recognize the accomplishments of John Sevier contributed to Tennessee history (i.e., State of Franklin's one and only governor, Tennessee's first governor, United States Congressman, soldier).	
4.5.spi.13. analyze how the Louisiana Purchase influenced the growth of the United States (i.e., increased size, encouraged expansion, increased natural resources.)	
4.6.spi.3. read and interpret a passage about a political or economic issue which individuals may respond to with contrasting views (i.e., state taxes, federal taxes, slavery, Bill of Rights).	
4.3.spi.7. determine how density, distribution, and growth rate affected United States settlement patterns.	
4.3.spi.8. identify cause and effect relationships between population distribution and environmental issues (i.e., water supply, air quality, solid waste).	
4.5.spi.9. determine the influence Lewis and Clark's expedition had on westward expansion.	BP: "Lewis and Clark"
4.5.spi.12. Read and interpret a passage about the Trail of Tears.	BP: "Trail of Tears"
4.5.spi.2. identify major Tennessee political leaders (i.e., Andrew Jackson, Sam Houston, James Polk, Sequoyia, David Crockett, Nancy Ward).	
4.5.spi.1. identify Native American groups in Tennessee before European explorations (i.e., Cherokee, Creek, Chickasaw).	

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<p>4.6.spi.2. determine how the issue of slavery caused political and economic tensions between government policy and people's beliefs (i.e., abolitionists, plantation owners, state's rights, central government, Loyalists).</p>	

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<b>Social Studies 5<sup>th</sup> 6 weeks</b>	<b>Suggested activities:</b>
<b>Tennessee Unit and TCAP Review</b>	
4.3.spi.2. identify and use key geographical features on maps (i.e., mountains, rivers, plains, valleys, forests).	
4.3.spi.4. recognize river systems that impacted early American history (i.e., Mississippi, Mystic, Charles, Hudson).	
4.1.spi.1. identify pre-Colonial Native American groups (i.e., Cherokee, Creek, Chickasaw, Aztec, Mayans, Olmec, Mississippi Mound Builders).	
4.1.spi.5. identify various racial and ethnic groups in Tennessee at the founding of statehood (i.e. Cherokee, Creek, Shawnee, English, Scottish, French, American born pioneers).	
4.5.spi.2. identify major Tennessee political leaders (i.e., Andrew Jackson, Sam Houston, James Polk, Sequoyia, David Crockett, Nancy Ward).	
4.5.spi.1. identify Native American groups in Tennessee before European explorations (i.e., Cherokee, Creek, Chickasaw).	Notable TN- PowerPoint
4.5.spi.4. determine the hardships faced by early Tennessee settlers in the late 1700's (i.e., security, isolated communities, lack of access to goods, natural geography).	
4.5.spi.12. Read and interpret a passage about the Trail of Tears.	
<b>Social Studies 6<sup>th</sup> 6 weeks</b>	
<b>Tennessee Play</b>	

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<b><u>Science 1st 6 Weeks</u></b>	
<b>Embedded Inquiry</b>	<b>Suggested activities:</b> EdCity-Lab test, Day at the Museum
<b>0407.Inq.1</b> Identify specific investigations that could be used to answer a particular question and identify reasons for this choice	
<b>0407.Inq.2</b> Identify tools needed to investigate specific questions	
<b>0407.Inq.3</b> Maintain a science notebook that includes observations, data, diagrams, and explanations.	Keep Science notebook in binders.
<b>0407.Inq.4</b> Analyze and communicate findings from multiple investigations of similar phenomena to reach a conclusion	
<b>SPI 0407.Inq.1</b> Select an investigation that could be used to answer a specific question.	
<b>Life Science</b>	
<b>Cells</b>	BN Cells/BN Plants EdCity-Search 4 Life
<b>0407.1.1</b> Use illustrations or direct observations to compare and contrast the basic structures of plant and animal cells.	BrainPop-Cellular/Genetics; Cell Structure
<b>0407.1.2</b> Create a basic model of the cell that illustrates different cell structures and describes their functions	Cell Cookie
<b>SPI 0407.1.1</b> Compare basic structures of plant and animal cells	Double Bubble Map
<b>Interdependence</b>	EdCity-The Huntress
<b>0407.2.1</b> Analyze how an	EC-Animal Rescue

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increase or decrease in competition or predation affects an ecosystem.	BP-Ecosystems
<b>0407.2.2</b> Design a simple experiment to illustrate the effects of competition, predation, and interdependency among living things.	
<b>SPI 0407.2.1</b> Recognize the impact of predation and competition on an ecosystem.	
Flow of Matter and Energy	BN Food Web
<b>0407.3.1</b> Create a food web that illustrates the energy relationships between plants and animals and the key issues or assumptions found in the model.	BP-Food Chain Food Chain card game
<b>0407.3.2</b> Classify organisms as carnivores, herbivores, or omnivores	Creature Features
<b>0407.3.3</b> Identify how a variety of organisms meet their energy needs.	
<b>SPI 0407.3.1</b> Determine how different organisms function within an environment in terms of their location on an energy pyramid.	Draw and label an energy pyramid

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<b>Science 2<sup>nd</sup> 6 Weeks</b>	
<b>Heredity</b>	BN Life Cycles
<b>0407.4.1</b> Design a simple demonstration that illustrates the relationship between reproduction and survival of a species.	
<b>SPI 0407.4.1</b> Draw conclusions about the relationship between reproduction and the survival of a species.	
<b>0407.4.2</b> Study the life cycles of a variety of organisms and determine whether these processes illustrate complete or incomplete.	
<b>SPI 0407.4.2</b> Distinguish between complete and incomplete metamorphosis.	BP-Metamorphosis Foldable
<b>Biodiversity and Change</b>	BN Invertebrates-Fall Break week
<b>0407.5.1</b> Classify animals according to their physical adaptations for obtaining food, oxygen, and surviving within a particular environment.	
<b>0407.5.2</b> Describe how animal behaviors such as migration, defense, means of locomotion, and hibernation enable them to survive in an environment.	BP-Migration AIMS-worm activity
<b>0407.5.3</b> Investigate tropisms that plants exhibit in response to changes in their environment.	Put plant in window
<b>SPI 0407.5.1</b> Determine how a physical or behavioral adaptation can enhance the chances of survival.	BP-Camouflage, Hibernation, Extinction
<b>SPI 0407.5.2</b> Infer the possible reasons why a species became endangered or extinct.	

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<b>Science 3<sup>rd</sup> 6 Weeks</b>	
<b>Earth and Space Science</b>	
The Universe	BN Moon, BN Outer space, BP-Moon, EC-Planet Watch
<b>0407.6.1</b> Chart the movements of the sun, moon, and earth to develop an explanation for the phases of the moon and solar and lunar eclipses.	
<b>0407.6.2</b> Sequence the major phases of the moon during a lunar cycle.	Make moon phase cards
<b>SPI 0407.6.1</b> Organize the phases of the moon in the correct sequence	
<b>SPI 0407.6.2</b> Infer that the moon's phases are caused by the revolution of the moon and earth around the sun.	
<b>The Earth</b>	BN Rivers and Streams
<b>0407.7.1</b> Prepare a demonstration to illustrate how wind and water affect the earth's surface features.	Experiment in science book
<b>0407.7.2</b> Design an investigation to demonstrate how erosion and deposition change the earth's surface.	
<b>SPI 0407.7.1</b> Design a simple model to illustrate how the wind and movement of water alter the earth's surface.	
<b>0407.7.3</b> List factors that determine the appropriate use of an earth material.	
<b>0407.7.4</b> Use data from a variety	

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of informational texts to analyze and evaluate man's impact on non-renewable resources.	
<b>SPI 0407.7.2</b> Analyze how different earth materials are utilized to solve human problems or improve the quality of life.	
<b>The Atmosphere</b>	BN Atmosphere BN Water Cycle
<b>0407.8.1</b> Prepare a model that illustrates the basic features of the water cycle.	EC-Dried Out Draw and label a water cycle Water Cycle bracelet
<b>0407.8.2</b> Use long term weather data to distinguish between weather and climate.	
<b>SPI 0407.8.1</b> Identify the basic features of the water cycle and describe their importance to life on earth.	EC-Dried Out

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<b>Science 4<sup>th</sup> 6 weeks</b>	
<b>0407.8.3</b> Use an illustration to predict and draw conclusions about how weather and climate affect the water cycle.	BN Climates, BP-Climates
<b>SPI 0407.8.2</b> Distinguish between weather and climate.	BP-Weather
<b>Physical Science</b>	
<b>Matter</b>	BN Phases of Matter, EC-Junkyard, Balloon Ride
<b>0407.9.1</b> Use appropriate tools to measure and compare the physical properties of various solids and liquids.	BP-Measuring Matter
<b>SPI 0407.9.1</b> Choose an appropriate tool for measuring a specific physical property of matter.	
<b>SPI 0407.9.2</b> Determine the mass, volume, and temperature of a substance or object using proper units of measurement.	
<b>0407.9.2</b> Compare the causes and effects of various physical changes in matter.	BP-Matter Changing States
<b>SPI 0407.9.3</b> Interpret the causes and effects of a physical change in matter.	BP-Changing States
<b>Energy</b>	BN Energy BN Light Optics
<b>0407.10.1</b> Design an investigation to demonstrate how different forms of energy release heat or light.	BP-Heat EC-Lights Out, Tunnel Vision, Zuba's Blackout
<b>SPI 0407.10.1</b> Identify different forms of energy, such as heat, light, and chemical	BP-Forms of Energy
<b>0407.10.2</b> Design an experiment to investigate how different surfaces determine if light is reflected, refracted, or absorbed	BP-Refraction and Diffraction BP-Light

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<b>SPI 0407.10.2</b> Determine which surfaces reflect, refract, or absorb light.	
<b>0407.10.3</b> Gather and organize information about a variety of materials to categorize them as translucent, transparent, or opaque.	
<b>SPI 0407.10.3</b> Determine whether a material is transparent, translucent, or opaque.	

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<b>Science 5<sup>th</sup> 6 Weeks</b>	
<b>Motion</b>	
<b>0407.11.1</b> Identify the position of objects relative to fixed reference points	
<b>SPI 0407.11.1</b> Describe the position of an object relative to fixed reference points.	
<b>0407.11.2</b> Design an investigation to identify factors that affect the speed and distance traveled by an object in motion.	BP-Distance, Rate, and Time BP-Acceleration
<b>0407.11.3</b> Complete a coordinate graph to describe the relative positions of objects.	
<b>0407.11.4</b> Plan and execute an investigation that demonstrates how friction affects the movement of an object.	BN Friction EC-Viva La Resistance
<b>SPI 0407.11.2</b> Identify factors that influence the motion of an object.	BN Gravity BP-gravity
<b>0407.11.5</b> Design and implement an investigation to determine that the speed of an object is equal to the distance traveled over time.	
<b>SPI 0407.11.3</b> Determine the relationship between speed and distance traveled over time.	
<b>Forces in Nature</b>	BN Electrical Current BPU-Guest Speaker
<b>SPI 0407.12.1</b> Identify how magnets attract or repel one another.	BN Magnetism BP-Magnetism EC-Treasure Hunt
<b>0407.12.1</b> Explore the interactions between an electrically charged object and other materials.	BP-Electricity
<b>0407.12.2</b> Design an experiment to investigate how a simple electromagnet affects common objects.	BP-Electromagnets
<b>0407.12.3</b> Describe how	BP-Electrical Circuits

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electricity passes through a simple circuit that includes a battery, wire, switch, and bulb.	BP- Current Electricity EC-Robot Repair AIMS Activity-Path finders
<b>0407.12.3</b> Describe how electricity passes through a simple circuit that includes a battery, wire, switch, and bulb.	

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<b>Science 6<sup>th</sup> 6 Weeks</b>	
<b><u>Embedded Technology and Engineering</u></b>	
<b>0407.T/E.1</b> Explain how different inventions and technologies impact people and other living organisms.	
<b>0407.T/E.2</b> Design a tool or a process that addresses an identified problem caused by human activity.	
<b>0407.T/E.3</b> Determine criteria to evaluate the effectiveness of a solution to a specified problem.	
<b>0407.T/E.4</b> Evaluate an invention that solves a problem and determine ways to improve the design.	
<b>SPI 0407.T/E.1</b> Select a tool, technology, or invention that was used to solve a human problem.	
<b>SPI 0407.T/E.2</b> Recognize the connection between a scientific advance and the development of a new tool or technology.	