

Grade 5	Unit 1: Science Processes: Scientific Method		Suggested Length: 2 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
<p>1. Describe the steps of the Scientific Method?</p> <p>2. Explain how the Scientific Method is used for problem solving?</p>	<p><u>Program of Studies</u></p> <ul style="list-style-type: none"> ❑ 2.1 Scientific Ways of Thinking and Working <ul style="list-style-type: none"> ❑ refine and refocus questions that can be answered through scientific investigation combined with scientific information ❑ use appropriate equipment, tools, techniques, technology, and mathematics to gather, analyze, and interpret scientific data ❑ use evidence, logic, and scientific knowledge to develop explanations design and conduct scientific investigations ❑ communicate designs, procedures, observations, and results of scientific investigations ❑ review and analyze scientific investigations and explanations of other students ❑ <i>SI-1 Identify questions that can be answered through scientific investigations combined with scientific information.</i> ❑ <i>SI-2 Use appropriate equipment (e.g., watches), tools (e.g., rain gauges), techniques (e.g., classifying), technology (e.g., calculators), and mathematics in scientific investigations.</i> ❑ <i>SI-3 Use evidence (e.g., classifications), logic, and scientific knowledge to develop scientific explanations.</i> ❑ <i>SI-4 Design and conduct different kinds of scientific investigations to answer different kinds of questions.</i> ❑ <i>SI-5 Communicate (e.g., draw, speak) designs, procedures, and results of scientific investigations.</i> ❑ <i>SI-6 Review and analyze scientific investigations and explanations of other</i> 	<ul style="list-style-type: none"> ❑ Scientific Method ❑ Technology ❑ Lab Safety ❑ Science Equipment ❑ Question ❑ Hypothesis ❑ Experimentation ❑ Observation ❑ Conclusion ❑ Observe ❑ Infer ❑ Classify ❑ Predict ❑ Interpret data ❑ Measure ❑ Cause and Effect ❑ Compare and Contrast ❑ Sequencing 	<ul style="list-style-type: none"> ❑ Use the Science skills of Sequencing, Comparing, and Contrasting to Identify plants using a graphic organizer. DOK 1 ❑ Research a famous scientist and discuss their discoveries to the scientific world. DOK 2 ❑ Use the Scientific Method to discover which variables affect the molding of bread. Record your data on a graph and analyze your data. DOK 2 ❑ Research the different kinds of lab equipment. Explain how scientists use the equipment doing a lab. DOK 1 ❑ Open Response: Scientific Method. DOK 2

Grade 5	Unit 1: Science Processes: Scientific Method		Suggested Length: 2 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
	<i>students.</i>		

Grade 5	Unit 2: Earth and Space Science		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
<p>1. Explain how water goes through the process of the water cycle.</p> <p>2. Explain how water causes erosion of minerals and gases.</p> <p>3. Describe what our atmosphere is composed of.</p> <p>4. Describe how the atmosphere changes with elevation.</p> <p>5. Describe our solar system.</p> <p>6. Explain how different geological /global patterns affect our weather.</p>	<p><u>Program of Studies</u></p> <ul style="list-style-type: none"> ❑ <i>ESS-1 Model the water cycle and how water dissolves minerals and gases and carries them to the oceans.</i> ❑ <i>ESS-2 Explore the characteristics of the atmosphere and how the water cycle affects the atmosphere, clouds, weather and climate.</i> ❑ <i>ESS-3 Investigate living organisms' effects on the earth system.</i> <p><u>Core Content</u></p> <ul style="list-style-type: none"> ❑ SC-05-2.3.1 Students will <ul style="list-style-type: none"> ❑ describe the circulation of water (evaporation and condensation) from the surface of the Earth, through the crust, oceans, and atmosphere (water cycle); ❑ explain how matter is conserved in this cycle. <p>Water, which covers the majority of the Earth's surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle. This cycle maintains the world's supply of fresh water. DOK 2</p> <ul style="list-style-type: none"> ❑ SC-05-2.3.2 Students will explain interactions of water with Earth 	<ul style="list-style-type: none"> ❑ Humidity ❑ Evaporation, ❑ Condensation ❑ Precipitation ❑ Ground water ❑ 4 layers of the atmosphere. ❑ Water Cycle ❑ Air mass and pressure ❑ Front ❑ Hydrosphere ❑ Ocean water and salinity ❑ Water pressure ❑ Tide and water level change ❑ Current 	<ul style="list-style-type: none"> ❑ Explore how the water cycle affects our atmosphere. Write an article describing the path of one drop of water as it moves through the water cycle. Explain how water is conserved DOK 2 ❑ Weather varies depending on many factors. These factors are closely interrelated. A change in any one can bring about a change in the others. List several factors that could affect our weather. For each factor listed, describe what type of weather that might occur. DOK 3 ❑ Design a model showing the effects of water erosion on minerals and gases. DOK 2 ❑ Describe what a mountain climber would need to climb Mt. Everest. Explain why he would need these articles. DOK 2 ❑ Design a model of our Solar System. DOK 2 ❑ Open Response: Water Cycle and Erosion. DOK 2

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	<p>materials and results of those interactions (e.g., dissolving minerals, moving minerals and gases).</p> <p>Water dissolves minerals and gases and may carry them to the oceans. DOK 3</p> <ul style="list-style-type: none"> □ SC-05-2.3.3 Students will: <ul style="list-style-type: none"> □ describe Earth’s atmosphere as a relatively thin blanket of air consisting of a mixture of nitrogen, oxygen, and trace gases, including water vapor; □ analyze atmospheric data in order to draw conclusions about real life phenomena related to atmospheric changes and conditions. <p>Earth is surrounded by a relatively thin blanket of air called the atmosphere. The atmosphere is a mixture of nitrogen, oxygen, and trace gases that include water vapor. The atmosphere has different properties at different elevations. Conclusions based on the interpretation of atmospheric data can be used to explain real life phenomena (e.g., pressurized cabins in airplanes, mountain-climber’s need for oxygen). DOK 3</p> <ul style="list-style-type: none"> □ SC-05-2.3.4 Students will: <ul style="list-style-type: none"> □ analyze global patterns of atmospheric movement; □ explain the basic relationships of patterns of atmospheric movement to local weather. <p>Global patterns of atmospheric</p>		

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	<p>movement can be observed and/or analyzed by interpreting patterns within data. Atmospheric movements influence local weather. Oceans have a major effect on climate, because water in the oceans holds a large amount of heat. Related data can be used to predict change in weather and climate. DOK 3</p> <p><input type="checkbox"/> SC-05-2.3.5 Students will compare components of our solar system, including using models/representations that illustrate the system and resulting interactions.</p> <p>Earth is the third planet from the Sun in a system that includes the moon, the Sun, eight other planets and their moons, and smaller objects. The Sun, an average star, is the central and largest body in the solar system. Models/diagrams provide understanding of scale within the solar system. DOK 2</p>		

Grade 5	Unit 3: Life Science - Cells		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
<p>1. Explain how the function of different cell organelles keeps an organism alive.</p> <p>2. Describe how dead cells are</p>	<p><u>Program of Studies</u></p> <p><input type="checkbox"/> <i>5-LS-1 Recognize the relationship between structure and function at all level of organization (e.g., organ systems, whole organisms, and ecosystems).</i></p> <p><input type="checkbox"/> <i>5-LS-2 Model cells and recognizes that cells carry out functions needed to sustain life. All organisms are composed of cells, the fundamental unit of life. Most organisms are single cells; other organisms, including plants</i></p>	<p><input type="checkbox"/> Cell</p> <p><input type="checkbox"/> Cell Division</p> <p><input type="checkbox"/> Food Chain</p> <p><input type="checkbox"/> Food Web</p> <p><input type="checkbox"/> Nucleus</p> <p><input type="checkbox"/> Tissue</p> <p><input type="checkbox"/> Organs</p> <p><input type="checkbox"/> Organ Systems</p> <p><input type="checkbox"/> Cell Wall</p>	<p><input type="checkbox"/> Explain the cellular organization in all living organisms. DOK 1</p> <p><input type="checkbox"/> Describe the 3 major differences between plant and animal cells. (Shape, Chloroplast, Cell Wall) DOK 1</p> <p><input type="checkbox"/> Choose four organelles found in the plant/animal cell and explain how these organelles sustain life for the organism. DOK 1</p>

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<p>replaced.</p> <p>3. Compare different organisms to their adaptations.</p>	<p><i>and animals are multicellular.</i></p> <p><input type="checkbox"/> AC-2 Demonstrate the role science plays in everyday life and explores different careers in science</p> <p><u>Core Content</u></p> <p><input type="checkbox"/> SC-05-3.4.1 Students will describe and compare living systems to understand the complementary nature of structure and function.</p> <p>Observations and comparisons of living systems at all levels of organization illustrate the complementary nature of structure and function. Important levels of organization for structure and function include cells, tissues, organs, organ systems, organisms (e.g., bacteria, protists, fungi, plants, animals), and ecosystems. Examining the relationship between structure and function provide the basis for comparisons and classification schemes. DOK 2</p> <p><input type="checkbox"/> SC-05-3.4.2 Students will explain the essential functions of cells necessary to sustain life.</p> <p>Cells carry on the many functions needed to sustain life. Models of cells, both physical and analogical, promote understanding of their structures and functions. Cells grow and divide, thereby producing more cells. This requires that they take in nutrients, which provide energy for the work that cells do and make the materials that a cell needs. DOK 2</p> <p><input type="checkbox"/> SC-05-3.4.3 Students should understand that</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Cell Membrane <input type="checkbox"/> Chloroplast <input type="checkbox"/> Community <input type="checkbox"/> Cytoplasm <input type="checkbox"/> Decomposers <input type="checkbox"/> Mitochondria <input type="checkbox"/> Vacuoles <input type="checkbox"/> Organism <input type="checkbox"/> Ribosomes <input type="checkbox"/> Endoplasmic Reticulum <input type="checkbox"/> Ecosystem <input type="checkbox"/> Cell Division <input type="checkbox"/> Unicellular <input type="checkbox"/> Multicellular <input type="checkbox"/> Population <input type="checkbox"/> Decomposers <input type="checkbox"/> Abiotic <input type="checkbox"/> Biotic 	<ul style="list-style-type: none"> <input type="checkbox"/> Choose 3 organisms and explain how their biological adaptations have helped them to survive. DOK 2 <input type="checkbox"/> Design a mobile of unicellular and multicellular organisms. Be sure to include bacteria, protozoan, fungi, plants and animals. Compare the organisms. DOK 3 <input type="checkbox"/> Design an ecosystem, labeling the organism, population, community, decomposers, and the abiotic and biotic factors of the ecosystem. DOK 2 <input type="checkbox"/> Create a model of the plant/animal cell using different kinds of medium. Label each organelle and explain their function. DOK 3 <input type="checkbox"/> Construct a food chain and a food web. Compare a food chain to a food web. DOK 2 <input type="checkbox"/> Open Response: Cellular Structure DOK 2

Grade 5	Unit 3: Life Science - Cells		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
	<p><u>all</u> organisms are composed of cells, the fundamental unit of life. Most organisms are single cells; other organisms, including plants and animals are multicellular.</p> <ul style="list-style-type: none"> ❑ SC-05-3.5.1 Students will describe cause and effect relationships between enhanced survival/reproductive success and particular biological adaptations (e.g., changes in structures, behaviors, and/or physiology) to generalize about the diversity of species. <p>Biological change over time accounts for the diversity of species developed through gradual processes over many generations. Examining cause and effect relationships between enhanced survival/reproductive success and biological adaptations (e.g., changes in structures, behaviors, and/or physiology), based on evidence gathered, creates the basis for explaining diversity. DOK 2</p> <ul style="list-style-type: none"> ❑ SC-05-3.5.2 Students should understand that all organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment. ❑ SC-05-4.7.1 Students will: <ul style="list-style-type: none"> ❑ describe and categorize populations of organisms according to the function they serve in an ecosystem (e.g., producers, consumers, decomposers); ❑ draw conclusions about the effects of changes to populations in an ecosystem. <p>Populations of organisms can be categorized by the function they serve in an ecosystem.</p>		

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Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
	<p>Plants and some microorganisms are producers because they make their own food. All animals, including humans, are consumers, and obtain their food by eating other organisms. Decomposers, primarily bacteria and fungi, are consumers that use waste materials and dead organisms for food. Food webs identify the relationships among producers, consumers, and decomposers in an ecosystem. Using data gained from observing interacting components within an ecosystem, the effects of changes can be predicted. DOK 3</p> <p>❑ SC-05-4.7.2 Students should understand that a population consists of all individuals of a species that occur together at a given place and time. All populations living together and the physical factors with which they interact compose an ecosystem.</p>		

Grade 5	Unit 4: Physical Science: Properties of Matter		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
<p>1. Describe the building blocks of matter.</p> <p>2. Explain how compounds are made.</p> <p>3. Compare physical and chemical</p>	<p><u>Program of Studies</u></p> <p>❑ <i>7-PS-1 Investigate characteristic properties of substances.</i></p> <p>❑ <i>7-PS-2 Examine chemical reactions between substances recognize that the total mass remains the same and that substances are categorized by how they react.</i></p> <p>❑ <i>7-PS-3 Recognize that elements do not break down during normal laboratory reactions and how elements combine to produce compounds</i></p> <p><u>Core Content</u></p>	<p>❑ Matter</p> <p>❑ Mass</p> <p>❑ Volume</p> <p>❑ Weight</p> <p>❑ Density</p> <p>❑ Insulate</p> <p>❑ Element</p> <p>❑ Compound</p> <p>❑ Conservation of Mass</p> <p>❑ Proton</p> <p>❑ Neutron</p>	<p>❑ Research 4 different substances for their boiling point, melting point, freezing point, solubility, and density. Explain how these characteristics differentiate one substance from another. DOK 2</p> <p>❑ Design an experiment, using different strategies, to show how a mixture of substances can be separated into its original components. DOK 2</p> <p>❑ Construct a model to show how substances can be a solid, liquid, or gas by explaining the</p>

Grade 5	Unit 4: Physical Science: Properties of Matter		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
changes.	<ul style="list-style-type: none"> <input type="checkbox"/> SC-05-1.1.1 Students will describe the physical properties of substances (e.g., boiling point, solubility, density). <p>A substance has characteristic physical properties (e.g., boiling point, solubility) that are independent of the amount of the sample. DOK 2</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Electron <input type="checkbox"/> Nucleus <input type="checkbox"/> Molecule <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Melting point <input type="checkbox"/> Mixture <input type="checkbox"/> Boiling point <input type="checkbox"/> Freezing point <input type="checkbox"/> Compound <input type="checkbox"/> Periodic Table <input type="checkbox"/> Scientific formula <input type="checkbox"/> Properties <input type="checkbox"/> Physical change <input type="checkbox"/> Chemical change <input type="checkbox"/> Chemical reaction <input type="checkbox"/> Condensation <input type="checkbox"/> Solute <input type="checkbox"/> Solvent <input type="checkbox"/> Solubility 	<p>location of the atoms. DOK 2</p> <ul style="list-style-type: none"> <input type="checkbox"/> Compare different elements according to their properties. <input type="checkbox"/> Design a model of an atom, showing its electron configuration and its nucleus. DOK 2 <input type="checkbox"/> Model and describe the chemical and physical characteristics of matter. DOK 2 <input type="checkbox"/> Design a rocket using alka-seltzer tablets, film canister and water to illustrate a chemical change. Explain what new substance was made and why this substance propelled the film canister. DOK 2 <input type="checkbox"/> Open Response: Characteristics of a Substance. DOK 2

Grade 5	Unit 5: Physical Science: Motion and Forces		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
<p>1. Describe how visible and invisible forces can change an objects motion, direction, speed, and position.</p> <p>2. Explain how scientist record</p>	<p><u>Program of Studies</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>6-PS-1</i> Describe, measure and represent an object’s motion. <input type="checkbox"/> <i>6-PS-2</i> <i>Investigate balanced or unbalanced forces and the effects on an object’s motion.</i> <p><u>Core Content</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> SC-05-1.2.1 Students will interpret data in order to make qualitative (e.g., fast, slow, forward, backward) and quantitative 	<ul style="list-style-type: none"> <input type="checkbox"/> Force <input type="checkbox"/> Inertia <input type="checkbox"/> Friction <input type="checkbox"/> Speed <input type="checkbox"/> Velocity <input type="checkbox"/> Acceleration <input type="checkbox"/> Balanced forces <input type="checkbox"/> Unbalanced force <input type="checkbox"/> Action <input type="checkbox"/> Reaction 	<ul style="list-style-type: none"> <input type="checkbox"/> Analyze Newton’s first law of motion (objects at rest remain at rest, etc.) through the use of marbles in a classic game of marbles. DOK 2 <input type="checkbox"/> Using track and different size matchbox cars, determine if inertia and or elevation has anything to do with acceleration of the car. Record data on a graph and analyze data. DOK 2 <input type="checkbox"/> Demonstrate balanced and unbalanced forces using balloon rockets. Record and analyze

Grade 5	Unit 5: Physical Science: Motion and Forces		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
and analyze their data for qualitative and quantitative measurements.	<p>descriptions and predictions about the straight-line motion of an object.</p> <p>The motion of an object can be described by its relative position, direction of motion, and speed. That motion can be measured and represented on a graph. DOK 3</p> <ul style="list-style-type: none"> ❑ SC-05-1.2.2 Students should understand that forces are pushes and pulls, and that these pushes and pulls may be invisible (e.g., gravity, magnetism) or visible (e.g., friction, collisions). 	<ul style="list-style-type: none"> ❑ Gravity ❑ Magnetism ❑ Weight ❑ Newton Laws ❑ Motion ❑ Simple Machines 	<p>data. DOK 2</p> <ul style="list-style-type: none"> ❑ Construct an experiment using different size magnets to see their effects on metal model cars. Record data on a graph and analyze data. DOK 2 ❑ Open Response: Newton’s Laws. DOK 2

Grade 5	Unit 6: Physical Science: Transfer of Energy		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
<p>1. Explain how energy moves from one place to another.</p> <p>2. Describe the different forms of wave energy.</p>	<p><u>Program of Studies</u></p> <ul style="list-style-type: none"> ❑ <i>5-PS-1 Demonstrate that energy is a property of substances.</i> ❑ <i>5-PS-2 Observe forms of energy transfer. (e.g., vibration)</i> ❑ <i>5-PS-3 Observe the ways heat can move.</i> ❑ <i>5-PS-4 Recognize that the Sun’s energy arrives as light with a range of wavelengths and explore how light interacts with matter</i> ❑ <i>5-PS-5 Observe how electrical circuits transfer electrical energy</i> <p><u>Core Content</u></p> <ul style="list-style-type: none"> ❑ SC-05-4.6.1 Students will: <ul style="list-style-type: none"> ❑ classify energy phenomena as kinetic or potential; ❑ describe the transfer of energy occurring in simple systems or related 	<ul style="list-style-type: none"> ❑ Kinetic energy ❑ Potential energy ❑ Electric energy ❑ Thermal energy ❑ Conduction ❑ Convection ❑ Convection Currents ❑ Radiation ❑ Vibration ❑ Sound wave ❑ Compression ❑ Pitch ❑ Frequency ❑ Volume ❑ Decibel ❑ Reflection ❑ Absorption ❑ Echo 	<ul style="list-style-type: none"> ❑ Create a presentation showing 2 ways in which energy travels. DOK 3 ❑ Construct electrical circuits showing energy transfer. Use poster board to illustrate and explain this transfer of energy. Be sure to include evidence of heat, light, sound and magnetic effects that are produced. DOK 2 ❑ Draw a roller coaster showing the kinetic and potential energy. Include forces such as gravity and friction. DOK 2 ❑ Research different forms of energy: Light, Heat, Sound, Electrical, Chemical, Kinetic and Potential Energy. Report how these energy’s are used everyday. DOK 3 ❑ Research how light interacts with matter through refraction, absorption and reflection. Compare each interaction and give an example

Grade 5	Unit 6: Physical Science: Transfer of Energy		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
	<p>data.</p> <p>Energy can be classified as kinetic or potential. Energy is a property of many substances and energy can be found in several different forms. For example, chemical energy as found in food we eat or in the gasoline we burn in our car. Heat, light (solar), sound, electrical energy and the energy associated with motion (called kinetic energy) are examples of other forms of energy. Objects can also have energy simply by virtue of their position, called potential energy. Energy is transferred in many ways. Analyzing simple systems can provide the basis for describing the transfer of energy occurring within the system. DOK 2</p> <ul style="list-style-type: none"> ❑ SC-05-4.6.2 Students should understand that the Sun is a major source of energy for changes on Earth’s surface. The Sun loses energy by emitting light. A tiny fraction of that light reaches Earth, transferring energy from the Sun to Earth. ❑ SC-05-4.6.3 Students will: <ul style="list-style-type: none"> ❑ draw conclusions about the transfer of energy within models/representations of electrical circuits as evidenced by the heat, light, sound, and magnetic effects that are produced; ❑ describe changes within the system that would affect the transfer of energy. <p>Electrical circuits provide a means of transferring electrical energy. This transfer can be observed and described as heat,</p>	<ul style="list-style-type: none"> ❑ Echolocation ❑ Doppler effect ❑ Fundamental frequency ❑ Overtone ❑ Resonance ❑ Light energy ❑ Law of reflection ❑ Concave mirror ❑ Convex mirror ❑ Transparent ❑ Translucent ❑ Polarization ❑ Refraction ❑ Concave lens ❑ Convex lens ❑ Prism ❑ Electromagnetic ❑ Laser ❑ Sound Energy ❑ Light Energy 	<p>of each. DOK 2</p> <ul style="list-style-type: none"> ❑ Describe how heat energy moves from warmer objects to cooler objects by producing a poster/model. Explain how this phenomenon causes movement. DOK 2 ❑ Open Response: Energy Forms. DOK 2

Grade 5	Unit 6: Physical Science: Transfer of Energy		Suggested Length: 6 wks.
Essential Questions	<i>Program of Studies</i> and Core Content	Key Terms and Vocabulary	Classroom Instruction and <u>Assessment</u> Student will:
	<p>light, sound, and magnetic effects are produced. Models and diagrams can be used to support conclusions and predict consequences of change within an electrical circuit. DOK 3</p> <ul style="list-style-type: none"> ❑ SC-05-4.6.4 Students will identify predictable patterns and make generalizations about light and matter interactions using data/evidence. <p>Light energy interacts with matter by transmission (including refraction), absorption, or scattering (including reflection). DOK 3</p> <ul style="list-style-type: none"> ❑ SC-05-4.6.5 Students should understand that heat energy moves in predictable ways, flowing from warmer objects to cooler ones, until both objects reach the same temperature. By examining cause and effect relationships, consequences of heat movement and conduction can be predicted and inferred. 		