

6 Grade Science Pacing

1st Six Weeks

Content Focus	Standards	Critical Vocabulary
Inquiry and Technology Engineering	SPI 0807.Inq.1 Design a simple experimental procedure with an identified control and appropriate variables.	Control Variable Faulty interpretation Bias Prototype Protocol Unintended consequence Adaptive Assistive
	SPI 0807.Inq.2 Select tools and procedures needed to conduct a moderately complex experiment.	
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	SPI 0807.T/E.2 Evaluate a protocol to determine if the engineering design process was successfully applied.	
	SPI 0807.T/E.3 Distinguish between the intended benefits and the unintended consequences of a new technology. SPI 0807.T/E.4 Differentiate between adaptive and assistive engineered products (e.g., food, biofuels, medicines, integrated pest management).	

2nd Six Weeks

Content Focus	Standards	Critical Vocabulary
<p>Biodiversity and Change</p>	<p>SPI 0807.5.1 Use a simple classification key to identify an unknown organism.</p> <p>SPI 0807.5.2 Analyze structural, behavioral, and physiological adaptations to predict which populations are likely to survive in a particular environment</p> <p>SPI 0807.5.3 Analyze data on levels of variation within a population to make predictions about survival under particular environmental conditions.</p> <p>SPI 0807.5.4 Identify several reasons for the importance of maintaining the earth's biodiversity.</p> <p>SPI 0807.5.5 Compare fossils found in sedimentary rock to determine their relative age.</p>	<p>Classification Key Structural adaptation Behavioral adaptation Physiological adaptation Population Biodiversity Sedimentary rock Atoms</p>

3rd Six Weeks

Content Focus	Standards	Critical Vocabulary
Properties of Matter Chemical Reactions	<p>SPI 0807.9.1 Recognize that all matter consists of atoms.</p> <p>SPI 0807.9.3 Classify common substances as elements or compounds based on their symbols or formulas.</p> <p>SPI 0807.9.2 Identify the common outcome of all chemical changes.</p> <p>SPI 0807.9.4 Differentiate between a mixture and a compound.</p> <p>SPI 0807.9.5 Describe the chemical makeup of the atmosphere.</p> <p>SPI 0807.9.6 Compare the particle arrangement and type of particle motion associated with different states of matter.</p> <p>SPI 0807.9.8 Interpret the results of an investigation to determine whether a physical or chemical change has occurred.</p> <p>SPI 0807.9.9 Use the periodic table to determine the properties of an element.</p> <p>SPI 0807.9.10 Identify the reactants and products of a chemical reaction.</p>	Particle Particle motion Periodic table Chemical change Physical change Reactants Products Chemical Reaction

4th Six Weeks

Content Focus	Standards	Critical Vocabulary
<p>Properties of Matter (cont'd)</p> <p>Chemical Reactions (cont'd)</p> <p>Forces of Nature</p>	<p>SPI 0807.9.11 Recognize that in a chemical reaction the mass of the reactants is equal to the mass of the products (Law of Conservation of Mass).</p> <p>SPI 0807.9.12 Identify the basic properties of acids and bases.</p> <p>SPI 0807.12.1 Recognize that electricity can be produced using a magnet and wire coil.</p> <p>SPI 0807.12.2 Describe the basic principles of an electromagnet.</p> <p>SPI 0807.12.3 Distinguish among the Earth's magnetic field, a magnet, and the fields that surround a magnet and an electromagnet.</p>	<p>Law of Conservation of Mass</p> <p>Mixture</p> <p>Compound</p> <p>Acids</p> <p>Bases</p> <p>Magnetic field</p> <p>Electromagnet</p>

5th Six Weeks

Content Focus	Standards	Critical Vocabulary
<p>Properties of Matter</p> <p>Forces of Nature (cont'd)</p>	<p>SPI 0807.9.7 Apply an equation to determine the density of an object based on its mass and volume.</p> <p>SPI 0807.12.4 Distinguish between mass and weight using appropriate measuring instruments and units.</p> <p>SPI 0807.12.5 Determine the relationship among the mass of objects, the distance between these objects, and the amount of gravitational attraction.</p> <p>SPI 0807.12.6 Illustrate how gravity controls the motion of objects in the solar system.</p>	<p>Mass</p> <p>Weight</p> <p>Density</p> <p>Volume</p> <p>Gravity</p>

6th Six Weeks

Review, reinforce, or remediate based on needs of students as indicated by formative assessment data.