

Enduring Understanding	Standards Addressed	Essential Questions	Anchor Lesson	Assessment
<p>Physical Science</p> <p>Objects and materials can be differentiated by their properties.</p>	<p>Properties of Objects and Materials 1:</p> <p>Differentiate between properties of objects (e.g., size, shape, weight) and properties of materials (e.g., color, texture, hardness).</p>	<ol style="list-style-type: none"> 1. What are physical properties? 2. What is physical change? 3. What types of physical properties do scientists use to describe objects and materials? 	<p>Lab - Mystery Boxes</p> <p>Describe the properties of an object and have someone guess what the object is.</p> <p>Name some physical properties that you can observe with your senses.</p> <p>Group objects according to similarities in properties versus similarities in their materials.</p>	
<p>Energy can take different forms and has the ability to cause motion or create change.</p> <p>When you use energy, you often change its form.</p>	<p>Forms of Energy 4:</p> <p>Identify basic forms of energy (light, sound, heat, electrical, and magnetic).</p> <p>Recognize that energy has the ability to cause motion or create change</p> <p>Forms of Energy 5:</p> <p>Give examples of how energy can be transferred from one form to another.</p>	<ol style="list-style-type: none"> 1. How is energy classified? 2. How do I use energy? 3. How can energy change forms? 4. How does energy change form? 5. What are the forms of energy? 	<p>Brainstorm the types of energy, classify them into groups (light, heat, sound, electrical and magnetic)</p> <p>Lab - Investigating a chemical change</p> <p>Lab - Investigating radiant energy</p>	

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<p>Electricity in circuits requires an electrical current to produce light, heat, or sound.</p>	<p>Electrical Energy 6: Recognize that electricity in circuits requires a complete loop through which an electrical current can pass, and that electricity can produce light, heat, and sound.</p>	<ol style="list-style-type: none"> 1. How can electricity currents carry energy? 2. What is an electric circuit? 3. What kind of circuit can an electric current move through? 4. What can an electric circuit produce? 	<p>Create circuits using wire, batteries and light bulbs.</p> <p>Lab - Testing Electrical Conductivity</p>	
<p>Electricity moves more easily through some materials than others.</p>	<p>Electrical Energy 7: Identify and classify objects and materials that conduct electricity and objects and materials that are insulators of electricity.</p>	<ol style="list-style-type: none"> 1. What are insulators and conductors? 2. How can you identify good insulators and conductors of electricity? 	<p>Lab - Exploring Electrical Charges</p> <p>Explore how electricity moves.</p> <p>Research how a generator works.</p> <p>Compare and contrast an electromagnet and an electric generator.</p> <p>Lab - Making a current detector</p>	

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<p>Electromagnets can be made with a coil of wire that uses an electric current to make a strong magnetic field.</p>	<p>Electrical Energy 8: Explain how electromagnets can be made and give examples of how they can be used.</p>	<ol style="list-style-type: none"> 1. How are electromagnets made and used? 2. How is an electromagnet like an ordinary magnet and how it is different? 3. How can magnetism be made with electricity? 	<p>Create an electromagnet using batteries, wires and a bolt.</p> <p>Create a current detector using wires, bar magnet and a compass.</p>	
<p>Sound is produced by vibrations and must move through a medium.</p>	<p>Sound Energy 11: Recognize that sound is produced by vibrating objects and requires a medium through which to travel.</p> <p>Relate the rate of vibration to the pitch of the sound.</p>	<ol style="list-style-type: none"> 1. How does sound travel? 2. How is sound produced? 	<p>Lab - Reflection/Refraction Kit</p> <p>Use a variety of objects to demonstrate how they vibrate and how sound travels.</p> <p>Use a slinky toy to model the difference between wavelength and frequency.</p>	