

Science Standards: Third Grade

<b>STANDARD I: Students will understand that the shape of Earth and the moon are spherical and that Earth rotates on its axis to produce the appearance of the sun and moon moving through the sky.</b>			
<b>Learning Targets</b> <ul style="list-style-type: none"> <li>• I can create a model of the Earth, Moon, and Sun in order to show how they move.</li> <li>• I can hypothesize the concept of how the Earth, Sun and Moon work together in a system.</li> <li>• I will understand that earth rotates on an axis.</li> <li>• I can describe how the moon gets its light from the sun and reflects back to the earth.</li> <li>• I can describe how the moon orbits around the Earth and creates different phases.</li> <li>• I can describe the different seasons in relationship to the Earth's revolution around the Sun.</li> </ul>	<b>Academic Vocabulary</b> model, orbit, sphere, moon, axis, rotation, revolution, appearance	<b>Questions Stems</b> How do the Earth, Sun, and Moon relate with each other in space?	<b>Possible Assessments</b> <ul style="list-style-type: none"> <li>• Compare and contrast graphic organizer</li> <li>• KWL Chart</li> </ul>
<b>STANDARD II: Students will understand that organisms depend on living and nonliving things within their environment.</b>			
<b>Learning Targets</b> <ul style="list-style-type: none"> <li>• I can create a model in order to compare and contrast living and nonliving things and how they influence their environment.</li> <li>• I can analyze smaller scale environments in order to understand larger scale environments</li> </ul>	<b>Academic Vocabulary</b> environment, interaction, living, nonliving, organism, survive, observe, terrarium, aquarium, temperature, moisture, small-scale	<b>Questions to Ask Students:</b> How do organisms use their environment?	<b>Possible Assessments</b> <ul style="list-style-type: none"> <li>• Description/Information Chart</li> </ul>
<b>STANDARD III: Students will understand the relationship between the force applied to an object and resulting motion of the object.</b>			
<b>STANDARD IV: Students will understand that objects near Earth are pulled toward Earth by gravity.</b>			
<b>Learning Targets</b> <ul style="list-style-type: none"> <li>• I understand that a push or pull is a force.</li> </ul>	<b>Academic Vocabulary</b> distance, force, gravity, weight, motion,	<b>Questions to Ask Students:</b>	<b>Possible Assessments</b>

<ul style="list-style-type: none"> <li>• I understand that Earth has its own force (gravity).</li> <li>• I understand that the greater force of an object the greater change in motion occurs.</li> <li>• I can describe the relationship between force and motion.</li> <li>• I can explain the force of gravity on Earth</li> </ul>	<p>speed, direction, simple machine</p>	<p>What is the difference between a Push and a Pull?  Does gravity affect people or things of different sizes differently?  Why can planes stay in the air if gravity is pulling them down?  How does gravity relate to how much you weigh</p>	<ul style="list-style-type: none"> <li>• Description/Information graphic organizer (Teacher could create all the questions or students could be responsible for asking and investigating the questions or a combination.</li> </ul>
<p><b>STANDARD V: Students will understand that the sun is the main source of heat and light for things living on Earth. They will also understand that the motion of rubbing objects together may produce heat.</b></p>			
<p>Learning Targets</p> <ul style="list-style-type: none"> <li>• I will hypothesize where Earth's source of heat comes from.</li> <li>• I will plan and carry out investigations in order to understand the misconceptions about heat sources.</li> <li>• I will plan and carry out investigations in order to provide evidence of mechanical energy.</li> </ul>	<p>Academic Vocabulary  mechanical, electrical, temperature, degrees, lubricated, misconception, heat source, machine</p>	<p>Questions to Ask Students  Why do we need the Sun?</p>	<p>Possible Assessments</p> <ul style="list-style-type: none"> <li>• Compare and contrast graphic organizer</li> <li>• KWL Chart</li> <li>• Cause and Effect</li> </ul>

