

Third Grade Interconnections
Unit III
Interactions: The Earth, Moon, Sun & Heat

Enduring Understanding:

The earth and moon rotate on their axes while orbiting the sun. Heat can be produced by the sun, machines, and by rubbing objects together.

Essential Questions

- *In what ways are the earth and moon similar and different?*
- *How does Earth's rotation on its axis affect the apparent movement of the sun in the sky?*
- *What impact does lack of sunlight have on living things?*
- *What are some ways that you can create heat or light?*

Core Curriculum Concepts/Skills: interactions, relationships, relative motion, cause and effect

Core Standards

Science

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.

Objective 1: Describe the appearance of Earth and the moon.

Objective 2: Describe the movement of Earth and the moon and the apparent movement of other bodies through the sky.

Standard II: 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.

Objective 1: Provide evidence showing that the sun is the source of heat and light for Earth.

Objective 2: Demonstrate that mechanical and electrical machines produce heat and sometimes light.

Objective 3: Demonstrate that heat may be produced when objects are rubbed against one another.

Science language students should use: model, orbit, sphere, moon, axis, rotation, revolution, appearance, mechanical, electrical, temperature, degrees, lubricated, misconception, heat source, machine