

## Life Science Focus

### Guiding Questions:

How are organisms structured to ensure efficiency and survival?

How do science and technology affect the quality of our lives?

### Content Standards:

The sense organs perceive stimuli from the environment and send signals to the brain through the nervous system.

Advances in technology allow us to acquire new information about our world.

Benchmark/Expected Performance	Unit	Materials	Field trips/ Outdoor Ed
<i>Students will:</i>			
<ol style="list-style-type: none"><li>1. Understand how light absorption and reflection allow us to see the shapes and colors of objects.</li><li>2. Know the structure and function of the human senses and the signals they perceive.</li><li>3. Be able to compare and contrast the structures of the human eye and the camera.</li><li>4. Know the use of different instruments, such as eye glasses, magnifiers, periscopes and telescopes to enhance our vision.</li></ol>	Vision and Hearing	Delta Kit Foss - Human Brain and Senses Resources Application of Optics Lab (Frey Scientific)  Edible Optics (Carolina)	

## Physical Science Focus

**Guiding Question:**

**What is the role of energy in our world?**

**Content Standards:**

**Sound is a form of energy that is produced by the vibration of objects and is transmitted by vibration of air and objects.**

**Light is a form of energy that travels in a straight line and can be reflected by a mirror, refracted by a lens, or absorbed by objects.**

Benchmark/ Expected performance

Unit

Materials

Field trips/  
Outdoor Ed

*Students will:*

<b>SOUND:</b> 1. Know the factors that affect pitch produced by vibrating objects 2. Know the factors that affect loudness produced by vibrating objects 3. Know how sound is transmitted, reflected and/or absorbed by different materials	Vision and Hearing	Delta Kit Foss - Human Brain and Senses Resources	
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## Earth/Space Focus

### Guiding Question:

How does the position of the Earth in the solar system affect the conditions on our planet?

### Content Standard:

Most objects in the solar system are in a regular and predictable motion.

Benchmark/ Expected performance	Unit	Materials	Field trips/ Outdoor Ed
<i>Students will:</i>			
1. Know the cause of day and night based on the rotation of Earth on its axis. 2. Know the monthly changes in the appearance of the moon based on the moon's orbit around the Earth. 3. Know the relationship of the seasons to the Earth's revolution around the sun.	Sun, Moon, Earth	Insights	Planetarium and/or Observatory