

Life Science Focus

Guiding Questions:

How are organisms structured to ensure efficiency and survival?

What are the processes responsible for life's unity and diversity?

Content Standards:

Living things have different structures and behaviors that allow them to meet their basic needs.

Organisms change their form and behavior as part of their life cycles.

Benchmark/ Expected Performance	Unit	Materials	Field trips/ Outdoor Ed
<i>Students will:</i>			
<ol style="list-style-type: none"> 1. Identify the characteristics of living, non-living and once-living things. 2. Know that animals take in water and nutrients, give off wastes, grow, respire, reproduce, and respond to stimuli in their environment. 3. Classify animals into groups based on characteristics (mammals, fish, reptiles, birds, amphibians, insects). 4. Identify features of animals that help them survive in their environment. 5. Describe the different ways that animals, including humans, obtain water and food. 6. Describe the structures that animals, including humans, use to move around. 7. Describe similarities and differences in the appearance and behavior of plants and animals. 	<p>Animal Groups</p>	<p>Insects (Foss)</p> <p>Teacher materials</p>	<p>Insect collection walks</p> <p>Monthly nature walks</p> <p>Peabody Museum</p> <p>Peckham Park</p>

<ol style="list-style-type: none"> 8. Describe how plants and animals depend on one another to live. 9. List the living and non-living components of an ecosystem and describe their interdependency. 10. Describe the similarities and differences in the appearance and behavior of adults and their offspring. 11. Describe the life cycle of organisms as they undergo metamorphosis (insects and frogs). 12. Describe the life cycles of organisms that grow but do not metamorphose (mammals, fish). 13. Predict that offspring will be very much like their parents but not exactly so. 	<p>Terrarium</p>		
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Physical Science Focus

Guiding Questions:

What is the role of energy in our world?

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

Content Standards:

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.

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

Benchmark/ Expected Performance <i>Students will:</i>	Unit	Materials	Field trips/ Outdoor Ed
<ol style="list-style-type: none"> 1. Identify natural and man-made sources of light. 2. Understand that light is necessary for vision. 3. Demonstrate that light can be absorbed, reflected, transmitted, and bent using mirrors and lenses. 4. Know that visible light contains the colors of the rainbow. 5. Know that the sun is the primary source of energy for the earth. 6. Understand how shadows are made. 7. Describe the changes in the length and direction of shadows during the day due to the earth's rotation. 	Light and Shadow	Teacher-made kit <i>Bear Shadow</i> (Frank Asch)	

Guiding Question:

What makes objects move the way they do?

Content Standard:

Magnets can make objects move without direct contact between the object and the magnet.

Benchmark/ Expected Performance

Unit

Materials

Field trips/
Outdoor Ed

Students will:

<ol style="list-style-type: none">1. Demonstrate that magnets can move some objects without touching them.2. Know that magnets can attract or repel each other.3. Know that magnets can attract some metals, such as iron, nickel, and steel.4. Sort objects by magnetic properties.	Magnets (optional)	Teacher-made kit	
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Earth/Space and Life Science Focus

Guiding Questions: What are the processes responsible for life's unity and diversity?
 How do matter and energy flow through ecosystems?
 How do materials cycle through the Earth's systems?

Content Standards: All organisms depend on the living and non-living features of the environment for survival.
 Organisms can survive and reproduce only in environments that meet their basic needs.
 Earth materials have different physical and chemical properties.

Benchmark/ Expected Performance	Unit	Materials	Field trips/ Outdoor Ed
<i>Students will:</i>			
<ol style="list-style-type: none"> 1. Know that oceans are vast bodies of salt water that cover most of the Earth's surface 2. Know that oceans contain many forms of life 3. Describe ocean habitats, i.e. intertidal zone, coral reef, etc. 4. Describe various plants and animals that live in the sea 5. Know food products that come from the sea 6. Know their responsibility as citizens for the Long Island Sound and other oceans 	<p>Oceans</p>	<p>Teacher materials</p> <p>Globe toss</p>	<p>Hammonasset Mystic Aquarium Marine animals Classroom visits Norwalk Maritime</p>