

Science Curriculum: Grade 4

Georgia Performance Standards: Year Curriculum Map

This document is part of a framework that was designed to support the major concepts addressed in the 4th Grade Science Curriculum of the Georgia Performance Standards through the processes of inquiry. These units are written to be stand alone units that may be taught in any sequence.

The focus of fourth grade revolves around the unifying concepts of interdependence and models. Each of the content units—ecosystems, weather, forces, stars and solar system, and sound and light—is designed to promote student understanding of content and to promote the development of process and inquiry skills.

Unit: Ecology	Unit: Weather	Unit: Forces and Motion	Unit: Stars and Solar System	Unit: Sound and Light
8 weeks	7 weeks	7 weeks	7 weeks	7 weeks
Focus:	Focus:	Focus:	Focus:	Focus:
<i>Identify roles of consumers, producers, and decomposers</i> <i>Illustrate food chains and food webs</i> <i>Identify ways adaptation can help organisms survive</i> <i>Predict how changes in an environment will effect a community</i> <i>Predict the effects on a population if there are too many or a scarcity of some animals or plants</i> <i>Identify factors leading to extinction</i>	<i>Identify solid, liquid, gas as states of water</i> <i>Recognize the temperature at which water changes state</i> <i>Investigate how clouds are formed</i> <i>Collect and analyze weather data to determine patterns</i> <i>Use weather data to predict weather</i> <i>Use weather instruments to collect data</i> <i>Use weather maps and weather symbols to communicate data</i>	<i>Investigate how things move, change direction or speed</i> <i>Identify simple machines</i> <i>Determine how simple machines use motion to make work easier</i> <i>Demonstrate the effect of gravity on the motion of an object</i> <i>Determine relationship between force and size, speed, or direction on motion</i>	<i>Observe stars in night sky and various resources</i> <i>Compare number, color, size and position of stars</i> <i>Identify constellations as patterns of stars</i> <i>Compare planets and stars in number, appearance, position</i> <i>Develop models of planets according to relative size and order from the sun</i> <i>Relate models to explanations of Earth/moon/sun in day/night cycle, phases of the moon, and seasonal changes on Earth</i>	<i>Identify materials as transparent, opaque, or translucent</i> <i>Use a mirror and light source to show reflection patterns</i> <i>Identify the attributes and use of convex lens, concave lens and prism</i> <i>Recognize that sound is produced by vibrations</i> <i>Recognize conditions that cause sound to vary</i> <i>Demonstrate changes of pitch</i>