

IES Correlations to Kentucky Core Content for Science Assessment

Grades 5 through 7 with Assessment at Grade 7

	Climate and Weather	Dynamic Planet	Energy Resources	Fossils	Materials and Mineral	Oceans	Rocks and Landforms	Soil	Water as a Resource
<p>Correlation Key: "XX" In-depth Coverage = In depth coverage of the concept in student edition. "X" Coverage = Coverage in student edition and/or teacher edition supports the development of the concept.</p>									
Conceptual Understandings: Earth and Space Science									
Structure of the Earth System: Lithosphere, Hydrosphere, Atmosphere									
SC-M-2.1.1 The Earth is layered. The lithosphere is the thin crust of the Earth. Lithospheric plates move slowly in response to movements in the mantle. There is a dense core at the center of the Earth.		XX				XX	X	X	
SC-M-2.1.2 Landforms are a result of a combination of constructive and destructive forces. Constructive forces include crustal deformation, volcanic eruption, and deposition of sediment, while destructive forces include weathering and erosion.		XX		X			XX	X	
SC-M-2.1.3 Materials found in the lithosphere and mantle are changed in a continuous process called the rock cycle.		X	X	X	X		XX	X	
SC-M-2.1.4 Soil consists of weathered rocks and decomposed organic material from dead plants, animals, fungi, protists, and bacteria. Soils are often found in layers, with each having a different chemical composition and texture.		X					X	XX	
SC-M-2.1.5 Water, which covers the majority of the Earth's surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle. Water dissolves minerals and gases and may carry them to the oceans.	X	X				XX		X	XX
SC-M-2.1.6 Earth is surrounded by a relatively thin blanket of air called the atmosphere. The atmosphere is a mixture of nitrogen, oxygen, and trace gases that include water vapor. The atmosphere has different properties at different elevations.	XX								
SC-M-2.1.7 Global patterns of atmospheric movement influence local weather. Oceans have a major effect on climate, because water in the oceans holds a large amount of heat.	XX					X			
Earth's History									
SC-M-2.2.1 The Earth's processes we see today, including erosion, movement of lithospheric plates, and changes in atmospheric composition, are similar to those that occurred in the past. Earth's history is also influenced by occasional catastrophes such as the impact of an asteroid or comet.	X	X		XX	X	X	XX	X	X

<p>Correlation Key: "XX" In-depth Coverage = In depth coverage of the concept in student edition. "X" Coverage = Coverage in student edition and/or teacher edition supports the development of the concept.</p>	Climate and Weather	Dynamic Planet	Energy Resources	Fossils	Materials and Mineral	Oceans	Rocks and Landforms	Soil	Water as a Resource
<p>SC-M-2.2.2 Fossils provide important evidence of how environmental conditions and life have changed.</p>			X	XX			X		
<p>Earth in the Solar System</p>									
<p>SC-M-2.3.1 Earth is the third planet from the Sun in a system that includes the moon, the Sun, eight other planets and their moons, and smaller objects such as asteroids and comets. The Sun, an average star, is the central and largest body in the solar system.</p>									
<p>SC-M-2.3.2 Most objects in the solar system are in regular and predictable motion. Those motions explain such phenomena as the day, the year, phases of the moon, and eclipses.</p>									
<p>SC-M-2.3.3 Gravity is the force that keeps the planets in orbit around the Sun and governs the rest of the motion in the solar system. The gravitational pull of the Sun and moon on Earth's oceans is the major cause of tides.</p>									
<p>SC-M-2.3.4 The Sun is the major source of energy for Earth. The water cycle, winds, ocean currents, and growth of plants are affected by the Sun's energy. Seasons result from variations in the amount of the Sun's energy hitting Earth's surface.</p>									
<p>Scientific Inquiry</p>									
<p>Students will:</p>									
<ul style="list-style-type: none"> refine and refocus questions that can be answered through scientific investigation combined with scientific information. 	XX	XX	XX	XX	XX	XX	XX	XX	XX
<ul style="list-style-type: none"> use appropriate equipment, tools, techniques, technology, and mathematics to gather, analyze, and interpret scientific data. 	XX	XX	XX	XX	XX	XX	XX	XX	XX
<ul style="list-style-type: none"> use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations. 	XX	XX	XX	XX	XX	XX	XX	XX	XX
<ul style="list-style-type: none"> design and conduct scientific investigations. 	XX	XX	XX	XX	XX	XX	XX	XX	XX
<ul style="list-style-type: none"> communicate (e.g., write, graph) designs, procedures, observations, and results of scientific investigations. 	XX	XX	XX	XX	XX	XX	XX	XX	XX
<ul style="list-style-type: none"> review and analyze scientific investigations and explanations of other students. 	XX	XX	XX	XX	XX	XX	XX	XX	XX
<p>Applications/Connections Science and Technology</p>									

<p>Correlation Key: "XX" In-depth Coverage = In depth coverage of the concept in student edition. "X" Coverage = Coverage in student edition and/or teacher edition supports the development of the concept.</p>	Climate and Weather	Dynamic Planet	Energy Resources	Fossils	Materials and Mineral	Oceans	Rocks and Landforms	Soil	Water as a Resource
<ul style="list-style-type: none"> describe how science helps drive technology and technology helps drive science. Because perfectly designed solutions do not exist, technological solutions have intended benefits and unintended consequences. 	X	X	XX	X	XX	X	X	X	XX
Science in Personal and Social Perspectives									
<ul style="list-style-type: none"> describe the individual's roles and responsibilities in the following areas: changes in populations, resources and environments including ecological crises and environmental issues, natural hazards, science and technology in society, and personal and societal issues about risks and benefits. 	X	X	XX	X	XX	X	X	X	XX
History and Nature of Science									
<ul style="list-style-type: none"> demonstrate the role science plays in everyday life: past, present, and future. Science is a human endeavor. Men and women of various social and ethnic backgrounds engage in activities of science (to include careers in science). Scientists formulate and test their explanations of nature using observations, experiments, and theoretical and mathematical models. It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists. 	XX	XX	XX	XX	XX	XX	XX	XX	XX