

**Third Grade Science  
Scope and Sequence 21-22**

The following is a recommended sequence in which to teach the standards within the clusters

**Process Standards should be taught throughout all lessons.**

**3.1 Scientific Investigations and Reasoning.** The student conducts classroom and outdoor investigations following school and home safety procedures and environmentally appropriate practices.

3.1(A) demonstrate safe practices as described in the TEA-approved safety standards during classroom and outdoor investigations using safety equipment as appropriate, including safety goggles and gloves

3.1(B) make informed choices in the use and conservation of natural resources by recycling or reusing materials such as paper, aluminum cans, and plastics.

**3.2 Scientific Investigations and Reasoning.** The student uses scientific inquiry methods during laboratory and outdoor investigations.

3.2(A) plan and implement descriptive investigations, including asking and answering questions, making inferences, and selecting and using equipment or technology needed, to solve a specific problem in the natural world

3.2(B) collect and record data by observing and measuring using the metric system and recognize differences between observed and measured data

3.2(C) construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and evaluate measured data

3.2(D) analyze and interpret patterns in data to construct reasonable explanations based on evidence from investigations

3.2(E) demonstrate that repeated investigations may increase the reliability of results; and

3.2(F) communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion.

**3.3 Scientific Investigations and Reasoning.** The student knows that information and critical thinking, scientific problem solving, and the contributions of scientists are used in making decisions.

3.3(A) analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing

3.3(B) represent the natural world using models such as volcanoes or Sun, Earth, and Moon system and identify their limitations, including size, properties, and materials

3.3(C) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists

**3.4 Scientific Investigations and Reasoning.** The student knows how to use a variety of tools and methods to conduct science inquiry.

3.4(A) collect, record, and analyze information using tools, including microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, wind vanes, rain gauges, pan balances, graduated cylinders, beakers, spring scales, hot plates, meter sticks, magnets, collecting nets, notebooks, and Sun, Earth, and Moon system models; timing devices, and materials to support observation of habitats of organisms such as terrariums and aquariums



STEM Activity



Coding Activity






PBL



Argument  
Driven  
Inquiry




**Cluster 1: Physical Science 21-22**  
**TEKS Strands Matter & Energy and Force Motion & Energy**  
**Process Standards should be taught throughout all lessons.(see page 1)**

**3rd Grade Science District Snapshot #1 Blueprint**

<p><b>Cluster 1:</b> Physical Science</p> <p><b>Suggested Pacing:</b> 8/12-10/21</p> <p>Snapshot Window 10/22-10/27</p>	Knowledge and Skills	3.5 <b>Matter and energy.</b> The student knows that matter has physical properties and those properties determine how it is described, classified, changed, and used.
	Readiness <b>*Essential</b>	3.5(A) measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float
	Supporting	3.5(B) describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container <b>3.5A Science Matter PreAssessment SPAN</b>
	Supporting	3.5(C) predict, observe, and record changes in the state of matter caused by heating or cooling such as ice becoming liquid water or condensation forming on the outside of a glass of ice water; or liquid water being heated to the point of becoming a vapor <i>*tested in 5th Grade</i>
	Supporting 	3.5(D) explore and recognize that a mixture is created when two materials are combined such as gravel and sand or metal and plastic paper clips
	Knowledge and Skills	<b>3.6 Force motion and energy.</b> The student knows that forces cause change and that energy exists in many forms
	Readiness <b>*Essential</b> 	3.6(A) explore different forms of energy, including mechanical, light, sound, and heat/thermal in everyday life <b>3.6A SCIENCE ENERGY Pre Assessment SPAN</b>
	Supporting <b>*Essential</b> 	3.6(B) demonstrate and observe how position and motion can be changed by pushing and pulling objects such as swings, balls, and wagons (tested on district snapshot) <i>*tested in 5th Grade</i> <b>3.6B Science Motion PreAssessment SPAN</b>
Supporting	3.6(C) observe forces such as magnetism and gravity acting on objects	

**Cluster 2: Earth Science**  
**TEKS Strands Earth and Space I & II**  
**Process Standards should be taught throughout all lessons.(see page 1)**






**3rd Grade Science District Snapshot #2 Blueprint**

<p><b>Cluster 2:</b> Earth Science</p> <p><b>Suggested Pacing:</b> 10/28-2/14</p> <p>Snapshot Window 2/15-2/17</p>	Knowledge and Skills	<b>3.7 Earth and Space</b> The student knows that Earth consists of natural resources and its surface is constantly changing
	Readiness <i>*Essential</i>	3.7(A) explore and record how soils are formed by weathering of rock and the decomposition of plant and animal remains <b>Science 3.7A Soil PreAssessment SPAN</b>
	Supporting 	3.7(B) investigate rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides <i>*tested in 5th Grade</i>
	Knowledge and Skills	<b>3.8 Earth and space.</b> The student knows that there are recognizable patterns in the natural world and among objects in the sky.
	Supporting 	3.8(A) observe, measure, record, and compare day-to-day weather changes in different locations at the same time that include air temperature, wind direction, and precipitation
	Supporting	3.7(C) explore the characteristics of natural resources that make them useful in products and materials such as clothing and furniture and how resources may be conserved
	Readiness <i>*Essential</i>	3.8(B) describe and illustrate the Sun as a star composed of gases that provides light and thermal energy <b>Science 3.8B Sun PreAssessment SPAN</b>
	Supporting	3.8(C) construct models that demonstrate the relationship of the Sun, Earth, and Moon including orbits and positions
Readiness 	3.8(D) identify the planets in Earth's solar system and their position in relation to the Sun <i>*tested in 5th Grade</i>	

**Cluster 3: Life Science**

**TEKS Strands Organisms & Environments I & II**  
**Process Standards should be taught throughout all lessons.(see page 1)**

**3rd Grade Science District Snapshot #3 Blueprint**

<p><b>Cluster 3:</b> Organisms and Environments</p> <p><b>Suggested Pacing:</b> 2/22-%</p> <p>Snapshot Window 4/12-4/14</p>	<p>Knowledge and Skills</p>	<p><b>3.9 Organisms and environments.</b> The student knows that organisms have characteristics that help them survive and can describe patterns, cycles, systems, and relationships within the environments.</p>
	<p>Readiness <b>*Essential</b></p> 	<p><a href="#">3.9(A)</a> observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem <i>*tested in 5th Grade</i></p>
	<p>Supporting</p>	<p>3.9(C) describe environmental changes such as floods and droughts where some organisms thrive and others perish or move to new locations.</p> <p><b>Science 3.9A Organisms PreAssessment SPAN</b></p>
	<p>Supporting</p> 	<p>3.9(B) identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the ecosystem such as removal of frogs from a pond or bees from a field</p>
	<p>Knowledge and Skills</p>	<p><b>3.10 Organisms and environments.</b> The student knows that organisms undergo similar life processes and have structures that help them survive within their environments.</p>
	<p>Readiness <b>*Essential</b></p>  	<p>3.10 (A) explore how structures and functions of plants and animals allow them to survive in a particular environment</p> <p><b>Science 3.10A Environment PreAssessment SPAN</b></p>
	<p>Supporting</p> 	<p>3.10 (B) investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady beetles</p> <p><i>*tested in 5th Grade</i></p>
<p>5/9-5/20</p>	<p>Revisit TEKS 3.5C, 3.6B, 3.7B, 3.8D, 3.9A, 3.10B as they are tested in 5th grade.</p>	