

Third Grade Parent Guide – Science

	1 st Grading Period	2 nd Grading Period	3 rd Grading Period	4 th Grading Period
Topics	Matter Force and Motion	Energy Earth and Space	Patterns on Earth Interactions in Ecosystems	Interactions in Ecosystems (cont.) Organisms and Environments
Focus TEKS	3.6ABCD, 3.7AB, 3.8A	3.8AB, 3.9AB, 3.10A	3.10ABC, 3.11ABC, 3.12ABCD	3.12 ABCD, 3.13AB
Topic Focus	Scientific Investigation & Reasoning - Investigate cause and effect relationships to explain scientific phenomena - Evaluate a design or object using criteria. Content - Properties of matter. - Solid, Liquids, and Gases - Combined Materials (mixtures/solutions) - Forces (magnets, pushes, and pulls) - Position and Motion Assessment Topics: - Measure and test properties of matter - Classify samples of matter as solids, liquids, and gases. - Effects of heating and cooling matter. - Benefits of combination of materials.	Scientific Investigation & Reasoning - Ask questions and define problems based on observations or information from text, phenomena, models, or investigations - Analyze data by identifying any significant features, patterns, or sources of error. Content - How magnets move things. - Pushes and pulls change motion and position of an object in motion. - Observe different forms of energy and connect how energy is part of increasing decreasing the speed of an object. - Height's effect on and objects speed. - Earth/Moon orbits and how they connect to changes in the night sky - Orbit models Assessment Topics: - Forces acting on an object - Everyday examples of energy: light, thermal, sound, and mechanical - Explain with a model the orbits of the Sun, Earth, and moon.	Scientific Investigation & Reasoning - Construct appropriate graphic organizers to collect data. - Identify and use patterns to explain scientific phenomena. Content - Measure and compare weather conditions and begin to connect how weather affects the surface of Earth. - Explore the structure and composition of soil. - Rapid changes to Earth's surface - Natural resources and conservation. Assessment Topics: - Recognizable processes change Earth over time. - Day to day weather - How soil is created - What causes rapid changes in Earth's surface? - Natural resources are important and can be managed.	Scientific Investigation & Reasoning - Investigation and reasoning skills will be integrated throughout all units and concept. - At least 40% of the common assessment questions will be dual coded to access science concepts and process skills Content - Environments have specific physical characteristics that provide food, water, air, and protection to populations and communities in an ecosystem. Assessment Topics: - Patterns, cycles, systems, and the relationship within environments. - Flow of energy in a food chain. - How changes in an environment cause some organisms to thrive and others to perish or move. - Identification of fossils. - Organisms undergo similar life processes and have structures and function to help them survive within their environments. - Explain how external structures and functions of animals enable them to survive in their environment - Illustrate and compare life cycles
Anchoring Phenomena	- How can you make ice cream in an instant? - How can a person complete an obstacle course?	- How does available energy affect motion? - Why does the night sky change?	- How do volcanoes change the surface of the Earth? - Why do Monarch butterflies come here? (Texas)	How do the structures of the pileated woodpecker help it survive in the forests of Texas?
Suggestions for Parental Involvement/Support	Cook with your child and identify the three states of matter. Example: Prepare and bake a pizza together.	- Play with the push/pull of magnets. - Toss a beach ball back and forth and talk about the forces involved.	- Talk about where volcanoes are in Texas. - Use chocolate ice cream shell topping to model how lava hardens into rock when it comes in contact with the cold.	- Research wild plants and animals that students can observe in their community. - Ask your student what structure a duck (any animal you see) has to help it survive.

