

Grade 3 Science

Exploring Matter and Energy Part 2

Grade 3 Science
Possible Scope and Sequence


1 st Semester	2 nd Semester
Exploring Matter and Energy Part 1 <ul style="list-style-type: none"> ▪ Physical properties of matter ▪ Physical states of matter ▪ Systems in matter 	The Natural World Part 2 <ul style="list-style-type: none"> ▪ Solar system ▪ Characteristics of the Sun
Exploring Matter and Energy Part 2 <ul style="list-style-type: none"> ▪ Forces ▪ Forces that shape the Earth ▪ Energy systems 	Living Systems Part 1 <ul style="list-style-type: none"> ▪ Habitats ▪ Competition ▪ Survival ▪ Modifying the environment ▪ Systems in the environment
The Natural World Part 1 <ul style="list-style-type: none"> ▪ Earth materials ▪ Properties of soil ▪ Earth systems 	Living Systems Part 2 <ul style="list-style-type: none"> ▪ Adaptations of species for survival ▪ Adaptations of individuals for survival ▪ Traits of plants ▪ Traits of animals ▪ Systems of inheritance and survival

Grade 3 Science
Possible Scope and Sequence
Scientific Processes

Knowledge and Skills	Student Expectations
3.1 The student conducts classroom and field investigations following home and school safety procedures. The student is expected to:	<ul style="list-style-type: none"> A. demonstrate safe practices during classroom and field investigations; and B. make wise choices in the use and conservation of resources and the disposal or recycling of materials
3.2 The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to:	<ul style="list-style-type: none"> A. plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology B. collect information by observing and measuring C. analyze and interpret information to construct reasonable explanations from direct and indirect evidence D. communicate valid conclusions E. construct simple graphs, tables, maps, and charts to organize, examine and evaluate information.
3.3 The student knows that information, critical thinking, and scientific problem solving are used in making decisions. The student is expected to:	<ul style="list-style-type: none"> A. analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information B. draw inferences based on information related to promotional materials for products and services C. represent the natural world using models and identify their limitations D. evaluate the impact of research on scientific thought, society, and the environment E. connect Grade 3 science concepts with the history of science and contributions of scientists.



Grade 3 Science
Possible Scope and Sequence
Scientific Processes

3.4 The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:	<ul style="list-style-type: none">A. collect and analyze information using tools including calculators, microscopes, cameras, safety goggles, sound recorders, clocks, computers, thermometers, hand lenses, meter sticks, rulers, balances, magnets, and compasses; andB. demonstrate that repeated investigations may increase the reliability of results.
---	---

The *National Science Education Standards* encourage teachers to place less emphasis on “separating science knowledge from science process” and instead promote the teaching of “process skills in context”. Therefore, all of the scientific processes from the Texas Essential Knowledge and Skills are embedded throughout the year and are indicated by the following icon: 

Grade 3 Science
Possible Scope and Sequence

Exploring Matter and Energy Part 2 (30 days @ 45 minutes per day)

TEKS	TAKS Obj.	Concepts/Processes/Skills	Assessment Resources	Instructional Resources	Textbook
3.6A Measure and record changes in the position and direction of the motion of an object to which a force such as a push or pull has been applied	1,3	Forces <ul style="list-style-type: none"> ▪ A force is a push or pull ▪ Forces can cause objects to change direction or speed ▪ Objects with more mass require more force to move them ▪ Applying a force, such as a tap or pulling, causes some objects to vibrate or move back and forth ▪ Vibrating objects produce sound ▪  Safety, Inquiry, Critical Thinking, Use of Tools 	www.sciencebenchmarks.org BTE: Not My Fault p. 9	BTE: Good Vibrations p. 10-19	
3.6B Identify that the surface of the Earth can be changed by forces such as earthquakes and glaciers	1,3	Forces that shape the Earth <ul style="list-style-type: none"> ▪ The Earth has a solid inner core covered by a mantle layer and a very thin top crust layer ▪ Destructive natural forces include moving water, wind, rain, glaciers, earthquakes ▪ Earthquakes can move the plates of the Earth's crust ▪  Safety, Inquiry, Critical Thinking, Use of Tools 	www.sciencebenchmarks.org	BTE: Not My Fault p. 1-16	