BROWNELL TALBOT

Third Grade Prioritized Science Standards

The prioritized standards listed align with the NGSS (Next Generation Science Standards) Performance Expectations. The NGSS also includes a set of Science and Engineering Practices for grades kindergarten through 12. A practice of science is to ask and refine questions that lead to descriptions and explanations of how the natural and designed world(s) work and which can be empirically tested. Engineering questions clarify problems to determine criteria for successful solutions and identify constraints to solve problems about the designed world. Both scientists and engineers also ask questions to clarify ideas. (see the link at the bottom for detailed descriptions of those condensed practices, grades K-12)

LIFE SCIENCE		
Molecules to Organisms	Growth & Development	Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. (3-LS1-1)
Ecosystems	Social Interactions & Group Behavior	Construct an argument that some animals form groups that help members survive. (3-LS2-1)
Heredity	Inheritance of Traits	Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms. (3-LS3-1)
	Variation in Traits	Use evidence to support the explanation that traits can be influenced by the environment. (3-LS3-2)
Biological Evolution	Natural Selection	Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. (3-LS4-2)
	Adaptation	Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. (3-LS4-3)
	Biodiversity & Humans	Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. (3-LS4-4)
EARTH SCIENCE		
Earth's Systems	Weather & Climate	Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. (3-ESS2-1) Obtain and combine information to describe climates in different regions of the world. (3-ESS2-2)
PHYSICAL SCIENCE		
Motion & Stability	Forces & Motion	Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. (3-PS2-1) Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. (3-PS2-2)
	Types of Interactions	Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. (3-PS2-3) Define a simple design problem that can be solved by applying scientific ideas about magnets. (3-PS2-4)
ENGINEERING		
Engineering Design	Defining & Delimiting a Problem	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. (3-5-ETS1-1)
	Developing Possible Solutions	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. (3-5-ETS1-2)

Science and Engineering Practices in the NGSS: brownell.edu/ngss