Second 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		
Ecosystems	Interdependent Relationships	Plan and conduct an investigation to determine if plants need sunlight and water to grow. (2-LS2-1) (*secondary* ETS1-2) Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. (2-LS2-2)
Biological Evolution	Biodiversity & Humans	Make observations of plants and animals to compare the diversity of life in different habitats. (2-LS4-1)
EARTH SCIENCE		
Earth's Place in the Universe	History of Planet Earth	Use information from several sources to provide evidence that Earth events can occur quickly or slowly. (2-ESS1-1)
Earth's Systems	Earth Materials & Systems	Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. (2-ESS2-1) (*secondary ETS1-3*)
	Plate Tectonics & Large-Scale System Interactions	Develop a model to represent the shapes and kinds of land and bodies of water in an area. (2-ESS2-2)
	Roles of Water	Obtain information to identify where water is found on Earth and that it can be solid or liquid. (2-ESS2-3)
PHYSICAL SCIENCE		
Matter & Its Interactions	Structure & Properties	Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. (2-PS1-1) Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. (2-PS1-2) Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object. (2-PS1-3)
	Chemical Reactions	Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot. (2-PS1-4)
ENGINEERING		
Engineering Design	Defining & Delimiting a Problem	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. (K-2-ETS1-1)
	Developing Possible Solutions	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. (K-2-ETS1-2)
	Optimizing the Design Solution	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. (K-2-ETS1-3)

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