DISPOSITIONS, ESSENTIAL SKILLS, AND KNOWLEDGE

SECOND GRADE SCIENCE

Science and Engineering Practices

- Asking Questions or Defining Problems
- Developing and Using Models
- Planning and Carrying Out Investigations
- Analyzing and Interpreting Data
- Using Mathematics and Computational Thinking
- Constructing Explanations and Designing Solutions
- Engaging in Argument from Evidence
- Obtaining, Evaluating, and Communicating Information

Changes in the Earth's Surface: The effects of wind, water, and other geological events can cause both slow and quick changes to the surface of the Earth.

- Develop and use models illustrating the patterns of landforms and water on Earth.
- Construct an explanation about changes in Earth's surface that happen quickly or slowly.
- Design solutions to slow or prevent wind or water from changing the shape of land.

Living Things and Their Habitats: Living things need water, air, resources form the land, and physical characteristics to survive in particular habitats.

- Obtain, evaluate, and communicate information about patterns of living things (plants and animals, including humans) in different habitats.
- Plan and carry out an investigation of the structure and function of plant and animal parts in different habitats.
- Develop and use a model that mimics the function of an animal dispersing seeds or pollinating plants.
- Design a solution to a human problem by mimicking the structure and function of plants and/or animals and how they use their external parts to help them survive, grow, and meet their needs.

Properties of Matter: All things are made of matter which exist in different forms and with different properties. Heating or cooling some types of matter may or may not irreversibly change their properties.

- Plan and carry out an investigation to classify different kinds of materials based on patterns in their observable properties.
- Construct an explanation showing how the properties of materials influence their intended use and function.
- Develop and use a model to describe how an object, made of a small set of pieces, can be disassembled and reshaped into a new object with a different function.
- Obtain, evaluate, and communicate information about changes in matter caused by heating or cooling.

