

Power Learning Goals

Science – 2nd Grade

Physical Sciences – Matter and It's Interactions

- 1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.**
 - Observations could include color, texture, hardness, and flexibility. Patterns could include the similar properties that different materials share.
- 2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.**
 - Examples of properties could include, strength, flexibility, hardness, texture, and absorbency.
- 3. 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.**
 - Examples of pieces could include blocks, building bricks, or other assorted small objects.
- 4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.**
 - Examples of reversible changes could include materials such as water and butter at different temperatures. Examples of irreversible changes could include cooking an egg, freezing a plant leaf, and heating paper.

Life Sciences – Ecosystems: Interactions, Energy, and Dynamics

- 5. Plan and conduct an investigation to determine if plants need sunlight and water to grow.**
- 6. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.**
 - Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solution to other people.

Life Sciences – Biological Adaptation: Unity and Diversity

7. Make observations of plants and animals to compare the diversity of life in different habitats.

- Emphasis is on the diversity of living things in each of a variety of different habitats.

Earth and Space Sciences – Earth's Place in the Universe

8. Use information from several sources to provide evidence that Earth events can occur quickly or slowly.

- Examples of events and timescales could include volcanic explosions and earthquakes, which happen quickly and erosion of rocks, which occurs slowly.

Earth and Space Sciences – Earth's Systems

9. Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.

- Examples of solutions could include different designs of dikes and windbreaks to hold back wind and water, and different designs for using shrubs, grass, and trees to hold back the land.

10. Develop a model to represent the shapes and kinds of land and bodies of water in an area.

11. Obtain information to identify where water is found on Earth and that it can be solid, liquid or gas.