

## 3<sup>rd</sup> Grade Science Bench Marks

### 1<sup>st</sup> Nine weeks

S3P2 Students will investigate magnets and how they affect other magnets and common objects.

- a. Investigate to find common objects that are attracted to magnets.
- b. Investigate how magnets attract and repel each other.

### 2<sup>nd</sup> Nine weeks

S3P1 Students will investigate how heat is produced and the effects of heating and cooling, and will understand a change in temperature indicates a change in heat.

- a. Categorize ways to produce heat energy such as burning, rubbing (friction), and mixing one thing with another.
- b. Investigate how insulation affects heating and cooling.
- c. Investigate the transfer of heat energy from the sun to various materials.
- d. Use thermometers to measure the changes in temperatures of water samples (hot, warm, cold) over time.

### 3<sup>rd</sup> Nine weeks

S3E1 Students will investigate the physical attributes of rocks and soils.

- a. Explain the difference between a rock and a mineral.
- b. Recognize the physical attributes of rocks and minerals using observation (shape, color, and texture), measurement, and simple tests (hardness).
- c. Use observation to compare the similarities and differences of texture, particle size, and color in top soils (such as clay, loam or potting soil, and sand).
- d. Determine how water and wind can change rocks and soil over time using observation and research.

S3E2 Students will investigate fossils as evidence of organisms that lived long ago.

- a. Investigate fossils by observing authentic fossils or models of fossils or view information resources about fossils as evidence of organisms that lived long ago.
- b. Describe how a fossil is formed.

#### **4<sup>th</sup> Nine weeks**

S3L1 Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.

- a. Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.
- b. Identify features of green plants that allow them to live and thrive in different regions of Georgia.
- c. Identify features of animals that allow them to live and thrive in different regions of Georgia.
- d. Explain what will happen to an organism if the habitat is changed.

S3L2 Students will recognize the effects of pollution and humans on the environment.

- a. Explain the effects of pollution (such as littering) on the habitats of plants and animals.
- b. Identify ways to protect the environment.
  1. Conservation of resources
  2. Recycling of materials