

Dear Parents,

We are so excited about science! During this nine-week unit, we will design an experiment to test the effect of force on an object such as a push or a pull, gravity, friction, or magnetism. We will also be involved in the study of soil. The examination of soil properties, includes color and texture, capacity to retain water, and ability to support the growth of plants. This will prepare them to study how soil is created during the upcoming nine weeks. We will also focus on electrical energy. We will experience electricity traveling in a closed path by creating an electrical circuit. Your child will also learn to differentiate between conductors and insulators. We will close out this nine weeks with studying changes to land. Students will be expected to observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice.

The concepts students are expected to master:

- Forces have observable effects on objects.
- We can test the effects of a force on an object.
- Forces that can affect objects include pushes, pulls, gravity, friction, and magnetism.
- Soils differ in their observable properties.
- Soils can be sorted based on particle size, texture, color, and capacity to retain water.
- Soils differ in their ability to support the growth of plants.
- Wind, water, and ice can cause changes to Earth's surface slowly over time.
- Earth's materials can be changed by weathering, erosion, and deposition.
- We can observe the results of weathering, erosion, and deposition on Earth's surface.
- Electricity travels in a closed path called a complete circuit.
- Conductors allow energy to pass; while insulators prevent energy from passing or slow energy down as it passes (like the resistant wire inside of a light bulb). There are different forms of energy including mechanical, sound, electrical, light, and heat.

Let your student build and play with different types of energy in their free time. Changes to land can be observed when you are traveling in the car. Energy, forces, and changes to land are all around us.

I hope this information helps you in working with your child through this exciting unit. During this unit your child will be engaged in lots of hands-on activities

Sincerely,
The Fourth Grade Team