

## 7<sup>th</sup> Grade Core Essential Questions for the Earth Unit

**Standard 2:** Students will understand the relationship between properties of matter and Earth's structure.

**Objective 1:** Examine the effects of density and particle size on the behavior of materials in mixtures.

### **Enduring Understanding**

Earth materials in a mixture will be sorted based on the density and particle size of the objects in the mixture.

### **Essential Questions**

1. Why does the Earth have layers?
2. Arrange the following in order from least dense to most dense: air, water, rock.
3. What is the density of a substance with a volume of 20 ml and a mass of 45 g?
4. Why are sand particles on a beach all relatively the same size?
5. What two factors are responsible for the position of a substance in water-sorted sediments?

## 7<sup>th</sup> Grade Core Essential Questions for the Earth Unit

**Standard 2:** Students will understand the relationship between properties of matter and Earth's structure.

**Objective 2:** Analyze how density affects Earth's structure.

### **Enduring Understanding**

The density of Earth substances affects the layering and structure of Earth's atmosphere, water, crust and interior. Models are used to describe the structure of Earth.

### **Essential Questions**

1. Describe the relative densities of Earth's atmosphere, water, crust, and interior layers.
2. Draw the layers of Earth. Include atmosphere, water, crust, and interior. Explain why each layer is in its particular location.
3. Describe an accurate model of Earth.