EXPLAIN PART 2

Read “Physical and Chemical Changes,” discuss the questions in the passage and record your responses.

**Physical and Chemical Changes**

Different properties or characteristics are used to identify and classify matter. Observing and measuring physical properties can help to determine the identity of a substance. For example, suppose you need to determine the identity of two different metal cubes. Both metals are shiny and have the same shape and volume, but one has a greater mass. One cube has greater density because they have identical volume but different masses. The physical property of density helps to determine the identity of the metal.

What is a property? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

During a physical change, the substance remains the same kind of matter. Changing the size, the shape, and the phase of a substance are examples of physical changes. An example of a physical change occurs when sugar dissolves in water. The sugar appears to disappear, but in fact, the particles of sugar have decreased in size. Once the water evaporates, the sugar is left behind, and no new substance is formed.

What is a physical change? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are examples of a physical change? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A chemical change occurs when a substance changes into a new substance. For example, when the acid vinegar is added to milk, a solid precipitate forms. This chemical change is similar to what happens when babies drink milk and spit up afterward. The solids are the precipitate formed from the reaction of the milk and the acid in the baby’s stomach.

What is a precipitate?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other evidence of a chemical change can include a change in color, a change in temperature, or a production of a gas. When an effervescent tablet is placed in water, the temperature of the water decreases, and a gas is formed. The tablet appears to dissolve, but it reacts with the water, creating a new substance this is a gas.

What is evidence of a possible chemical change? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Create a Folded Model to summarize information:**

In your folded model, include:

Definitions of physical and chemical changes.

Examples of each from labs

Drawings of each type of change.