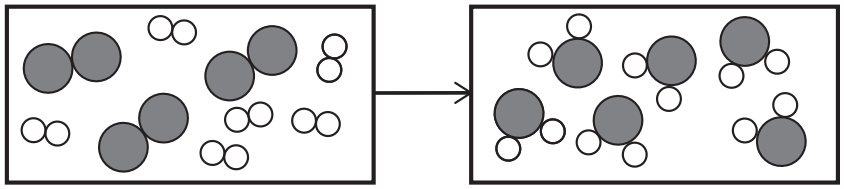
Checkout Questions

Lab 4. Conservation of Mass

How Does the Total Mass of the Substances Formed as a Result of a Chemical Change Compare With the Total Mass of the Original Substances?

1. The figure below shows a submicroscopic view of matter going through either a physical or chemical change.

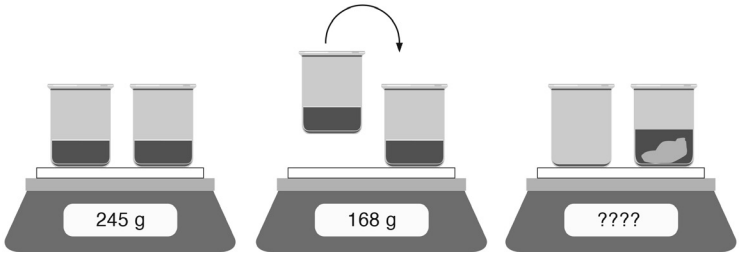


What type of change is illustrated in this figure?

a. A physical change
b. A chemical change
c. Unsure

Explain your answer. What rule did you use to make your decision?

2. A scientist takes the mass of two liquids. As shown in the figure below, the total mass of the two liquids and the containers holding them is 245 g. She then mixes the two liquids and a chemical reaction take place. A precipitate is produced as a result of the reaction.



What will be the total mass of the products and the containers holding them?

a. > 245 g
b. 245 g
c. < 245 g
d. Unsure

Explain your answer. What rule did you use to make your decision?

3. Scientists do not need to have a good imagination or to be creative when testing ideas.

a. I agree with this statement.
b. I disagree with this statement.

Explain your answer, using an example from your investigation about the conservation of mass.

4. "The mass of the reactants is 245 grams" is an example of evidence.

    a. I agree with this statement.
    b. I disagree with this statement.

    Explain your answer, using an example from your investigation about the conservation of mass.

5. Scientists often need to define the system under study during an investigation. Explain why defining the system under study is important, using an example from your investigation about the conservation of mass.

6. It is often important to track how matter flows into, out of, and within a system during an investigation. Explain why it is important to keep track of matter when studying a system, using an example from your investigation about the conservation of mass.