1. Which type of change involves only a change in shape, size, or state without forming a new substance?
   A. Chemical change B. Physical change
   C. Combustion D. Corrosion (B)

Explanation : In a physical change, only physical properties like shape, size, or state change, and no new substance is formed.

2. Which of the following is an example of a physical change?
   A. Burning of paper
   B. Rusting of iron
   C. Tearing of paper
   D. Formation of curd (C)

Explanation : Tearing of paper changes only the shape and size, so it is a physical change.

3. Which change shows that a substance may change in appearance but remain the same?
   A. Burning of paper
   B. Breaking of glass
   C. Formation of rust
   D. Reaction of vinegar and baking soda (B)

Explanation : Breaking of glass changes appearance but the substance remains glass, so no new substance is formed.

4. What happens when air is blown into lime water during Activity-3?
   A. Lime water remains clear
   B. Lime water turns blue
   C. Lime water turns milky
   D. Lime water evaporates (C)

Explanation : Carbon dioxide from exhaled air reacts with lime water, turning it milky.

5. Which gas is responsible for turning lime water milky?
   A. Oxygen
   B. Nitrogen
   C. Hydrogen
   D. Carbon dioxide (D)

Explanation : Carbon dioxide reacts with lime water to form calcium carbonate, making it appear milky.

6. The white substance formed when carbon dioxide reacts with lime water is _____.
   A. Calcium hydroxide
   B. Calcium carbonate
   C. Sodium carbonate
   D. Magnesium carbonate (B)

Explanation : The reaction forms calcium carbonate, an insoluble white substance.

7. Which observation indicates that a chemical change has occurred?
   A. Change in size
   B. Change in shape
   C. Formation of a new substance
   D. Change in state only (C)

Explanation : Formation of one or more new substances is the main sign of a chemical change

8. What happens when vinegar reacts with baking soda in Activity-4?
   A. No reaction occurs
   B. A solid is formed
   C. Carbon dioxide gas is released
   D. The solution becomes blue (C)

Explanation : The reaction produces carbon dioxide gas, seen as bubbles and fizzing.

9. Which change is classified as a chemical change?
   A. Melting of ice
   B. Folding paper
   C. Burning of paper
   D. Cutting vegetables (C)

Explanation : Burning of paper forms new substances like ash and gases, so it is a chemical change.

10. Change A is tearing of paper and Change B is burning of paper. Change A and B respectively are _____.
    A. Chemical, Chemical
    B. Physical, Physical
    C. Physical, Chemical
    D. Chemical, Physical (C)

Explanation : Tearing of paper is a physical change, while burning of paper is a chemical change.