

CHAPTER-5 | Changes Around Us – Physical and Chemical

QUIZ
PART-02

1. What is combustion?

- A. A physical change involving heat
- B. A chemical reaction producing only light
- C. A chemical reaction in which a substance reacts with oxygen and produces heat and/or light
- D. A process that forms no new substance (C)

Explanation : Combustion is defined as a chemical reaction in which a substance reacts with oxygen and produces heat and/or light.

2. Substances that undergo combustion reactions are called _____.

- A. Non-combustible substances
- B. Reactive substances
- C. Combustible substances
- D. Neutral substances (C)

Explanation : Materials that burn in the presence of oxygen are known as combustible substances.

3. Which of the following is a combustible substance?

- A. Sand
- B. Stone
- C. Wood
- D. Glass (C)

Explanation : Wood burns in the presence of oxygen and is therefore a combustible substance.

4. Which substance is NOT combustible?

- A. Paper
- B. Cotton
- C. Kerosene
- D. Sand (D)

Explanation : Sand does not burn and does not undergo combustion.

5. Burning of magnesium ribbon is considered a chemical change because _____.

- A. It changes colour only
- B. It melts completely
- C. It forms a new substance
- D. It can be reversed (C)

Explanation : Burning magnesium forms magnesium oxide, a new substance, which indicates a chemical change.

6. What is formed when magnesium ribbon burns in air?

- A. Magnesium hydroxide
- B. Magnesium carbonate
- C. Magnesium oxide
- D. Magnesium sulfide (C)

Explanation : Magnesium reacts with oxygen in air to form magnesium oxide, seen as a white powder.

7. Which gas is essential for combustion to take place?

- A. Nitrogen
- B. Carbon dioxide
- C. Oxygen
- D. Hydrogen (C)

Explanation : Oxygen is the component of air that supports combustion.

8. Why does a candle covered with a glass tumbler stop burning after some time?

- A. The candle melts
- B. Heat escapes
- C. Oxygen supply is cut off
- D. Wax solidifies (C)

Explanation : The glass tumbler prevents a continuous supply of oxygen, so combustion stops.

9. What gas is produced during the combustion of most substances?

- A. Oxygen
- B. Nitrogen
- C. Carbon monoxide
- D. Carbon dioxide (D)

Explanation : Combustion generally produces carbon dioxide gas as one of the products.

10. Which observation proves that oxygen is necessary for combustion?

- A. Covered candle burns brighter
- B. Covered candle stops burning
- C. Uncovered candle melts faster
- D. Candle produces smoke (B)

Explanation : The candle stops burning when covered, showing that lack of oxygen stops combustion.