

INTERNATIONAL INDIAN SCHOOL BURAI DAH
WORKSHEET FOR THE ACADEMIC YEAR 2025-26

Class-7th

Subject : Science

Lesson: L#5 Changes Around Us: Physical and Chemical

A. Fill in the blanks :

1. In _____ change no new substance is formed.
2. A foul smelling spoiled food is a _____ change.
3. Properties such as shape, size, colour and state of a substance are called _____ properties.
4. _____ gas released when baking soda is mixed with vinegar. (f)
5. Photosynthesis is an example of _____ change.
6. Burning of any substance is a _____ change.
7. Conditions for rusting of iron is _____ and _____.
8. The chemical name of vinegar is _____.

B. Choose the correct option:

1. Which of the following is a chemical change?
a) Boiling water b) Melting wax c) Rusting d) Freezing water
2. The burning of magnesium ribbon produces:
a) Carbon dioxide b) Water c) Magnesium Oxide d) None of these
3. What turns lime water milky?
a) Carbon dioxide b) Oxygen c) Hydrogen d) Nitrogen
4. Which of the following is a physical change?
(a) Rusting of iron (b) Combustion of magnesium ribbon (c) Burning of candle (d) Melting of wax
5. In which type of change a new substance is formed?
(a) Physical change (b) Chemical change (c) Both of these (d) None of these

C. The question below consists of an Assertion and a Reason. Use the following key to choose the appropriate answer.

- (a) Both **A** and **R** are true and **R** is the correct explanation of **A**.
(b) Both **A** and **R** are true but **R** is not the correct explanation of **A**.
(c) **A** is true but **R** is false.
(d) **A** is false but **R** is true.

1. **Assertion (A):** Melting of ice and boiling of water are examples of physical changes.

Reason (R): In physical changes, the original substance remains the same, only its form or state changes.

2. Assertion (A): When baking soda is mixed with vinegar, bubbles are formed due to the release of carbon dioxide.

Reason (R): The formation of gas and new substances during this process indicates a chemical change.

3. Assertion (A): Weathering of rocks involves both physical and chemical changes over time.

Reason (R): Physical forces only change the shape of rocks; chemical reactions do not affect their colour or composition.

D. Answer the following questions:

1. Name a natural process that includes both physical and chemical changes.
 2. Define : a) Ignition temperature b) Combustion
 3. What is a chemical change?
 4. Why is rusting of iron a chemical change?
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CH#3 Electricity : Circuits and their Components

A. Fill in the blanks :

1. If the switch is in the _____ position, the bulb will not glow.
2. The combination of two or more cells is called _____.
3. A _____ is a simple device that either completes or breaks a circuit.
4. _____ is an example of conductors of electricity.
5. Materials through which current cannot pass through are called _____.
6. Electric current can pass through _____ in one direction.
7. An electric cell has _____ terminals.
8. _____ is an example of insulators.

B. Choose the correct option:

1. Which of the following component is used to store electrical energy?
(a) Bulb (b) Switch (c) Wire (d) Battery
2. In an electric circuit, what happens when the switch is in the 'OFF' position?
(a) The circuit is open, and no current flows
(b) The circuit is closed, and current flows
(c) The bulb lights up
(d) The battery gets charged
3. Which combination will allow the LED to glow?
(a) Positive wire of battery to shorter LED terminal
(b) Any direction will work

- (c) Positive wire to longer LED terminal
- (d) Both wires to same LED terminal

4. Which material among the following is an insulator?

- (a) Copper wire (b) Aluminium strip (c) Rubber eraser (d) Steel spoon

5. Why do wires have a plastic or rubber covering?

- (a) To decorate the wire (b) To reduce electricity (c) To prevent electric shocks (d) none of these

C. The question below consists of an Assertion and a Reason. Use the following key to choose the appropriate answer.

- (a) Both **A** and **R** are true and **R** is the correct explanation of **A**.
- (b) Both **A** and **R** are true but **R** is not the correct explanation of **A**.
- (c) **A** is true but **R** is false.
- (d) **A** is false but **R** is true.

1. **Assertion (A):** The switch in a circuit is used to control the flow of electricity.

Reason (R): The switch can be placed anywhere in the circuit.

2. **Assertion(A):** Copper is more commonly used in electrical wiring than silver.

Reason(R): Copper is more expensive than silver.

3. **Assertion(A):** Electric wires are covered with plastic to prevent from shock.

Reason (R): Plastic is the good conductor of electricity.

D. Answer the following questions:

- 1.What is filament?
 - 2. What material is commonly used to make electrical wires?
 - 3. Which material does not allow electric current to pass through?
 - 4. What is the symbol for a battery in a circuit diagram?
 - 5. What happens when the filament of an incandescent lamp breaks?
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