

CREST Science Olympiad (CSO) Worksheet for Class 5

Topic States of Matter

@crestolympiads

🖄 info@crestolympiads.com

+91-98182-94134

Worksheet on States of Matter

1. Which of the statements is true for the particles of matter when a substance is heated?

- a. They slow down and move closer together.
- b. They speed up and move closer together.
- c. They slow down and move farther apart.
- d. They speed up and move farther apart.

2. Freddie wants to demonstrate the physical change of matter to his friends. Which of the following experiments would be appropriate for that?

- a. Mixing vinegar and baking soda to produce carbon dioxide gas
- b. Burning a candle and observing the wax melt
- c. Dissolving sugar in water to make a sweet solution
- d. Heating a magnet to make it lose its magnetic properties

3. Which of the following is a practical application of the expansion of matter due to temperature?

- a. Using a mercury thermometer to measure temperature
- b. Inflating a balloon by blowing air into it
- c. Burning a candle to produce light
- d. Cutting a piece of paper into smaller shapes
- 4. Which of the following represents a chemical change in matter?
 - a. Breaking a glass bottle
 - b. Mixing salt and sugar
 - c. Baking a cake
 - d. Shaping clay into a sculpture

5. Match the following changes in states of matter with their corresponding descriptions.

Olympiads

	Column I		Column II
1.	Evaporation	1.	Solid to liquid
2.	Melting	2.	Gas to liquid
3.	Condensation	3.	Liquid to solid
4.	Freezing	4.	Liquid to gas

- a. 1:A, 2:C, 3:B, 4:D
- b. 1:D, 2:B, 3:A, 4:C
- c. 1:B, 2:A, 3:D, 4:C
- d. 1:D, 2:A, 3:B, 4:C

Answer Key

- 1. d When a substance is heated, the particles gain energy, which makes them move faster. This increased speed causes the particles to move farther apart from each other. This is why substances generally expand or increase in volume when they are heated.
- **2.** b When a candle burns, the wax undergoes a physical change from a solid to a liquid state as it melts. This change can be observed by seeing the wax melting and dripping down the candle.
- **3.** a As the temperature increases, the mercury inside the thermometer expands and rises in the capillary tube, allowing us to measure and determine the temperature.
- **4.** c Baking a cake involves various chemical reactions. The ingredients undergo changes in their chemical composition and the raw batter transforms into a completely different substance with a different texture and taste, which is a result of chemical changes occurring during the baking process.
- **5.** a -

Evaporation: Liquid to Gas Melting: Solid to Liquid Condensation: Gas to Liquid Freezing: Liquid to Solid

More Questions Coming Soon – Keep Learning!

Olympiads

Difference between Ordinary & Extra-Ordinary is that "Little Extra"

