

STATES OF MATTER

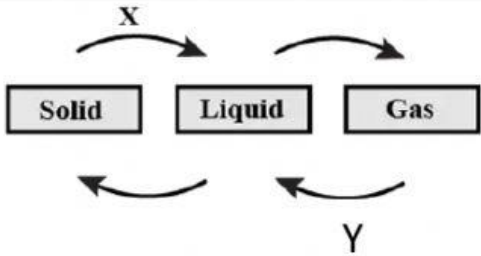
1. State whether **liquid, solid or gas**.

- A. A substance changes shape and volume according to its container; _____
- B. A substance changes neither shape nor volume; _____
- C. A substance does not change volume but does changes shape according to its container; _____
- D. Which state has the strongest forces of attraction? _____
- E. Which state has the weakest forces of attraction? _____

2. **FILL IN THE CORRECT WORD**

- A. At _____ particles have enough energy to break their bonds and the liquid evaporates into a gas.
- B. Condensation involves a change of state from _____ to _____
- C. Condensation occurs when water vapour _____
- D. Melting involves a change of state from _____ to _____
- E. Which is the opposite of condensation? _____
- F. Dew drops seen in the leaves of some plants in the morning. This is an example of _____.
- G. _____ is the process by which water vapor changes into liquid water.
- H. The _____ depends on wind speed, temperature, and surface area.
- I. At which temperature would water evaporate fastest? _____
- J. In which state do the particles have the most energy? _____

Multiple choice items. Circle the letter corresponding to the best answer.

1. Matter changing from a solid to a liquid is called: A evaporation B sublimation C deposition D melting	2. The melting point of water is: A 0°C B 100°C C 32°C D 60°C
3. This matter has a fixed shape and volume with particles closely packed together with little movement. It is a: A liquid B solid C gas D plasma	4. Matter has _____. A. no mass but occupies space B. mass but occupies no space C. mass and occupies space D. no mass and occupies no space
5. A property NOT possessed by a fluid is _____. A. it can flow B. it has mass C. it has a definite shape D. can be perceived by our senses	6. The process by which wet clothes dry up is called _____. A. Condensation B. Evaporation C. Melting D. Solidifying
7. The diagram shows the changes in state of water (H₂O). What is the process X called? A. Freezing C. Evaporation B. Melting D. Boiling 8. What process is happening at Y? A. Sublimation C. Evaporation C. Melting D. Condensation	 <i>Use the above to answer questions 7 and 8</i>

9. Which causes the high density of solids? A. The particles are more massive than those in liquids. B. The intermolecular forces between particles are weak. C. The particles are packed closely together. D. The energy of the particles is very high.	10. The particles in a liquid are usually A. closer together and lower in energy than those in a solid. B. farther apart and higher in energy than those in a gas. C. closer together and lower in energy than those in a gas. D. farther apart and lower in energy than those in a solid.
11. A solid is a state of matter that has a(n) A indefinite volume and an indefinite shape. B definite volume and a definite shape. C definite volume and an indefinite shape. D indefinite volume and a definite shape. 13. Which state of matter is represented above A. Solid B. Liquid C. Gas D. Frozen	12. The state of matter in which particles are arranged in a regular pattern is called A. Liquid C. Gas B. C Solid D. Fluid 14. The diagram here could represent which of the following? A. Ice C. Marbles B. Steam D. Warm water