

Solids, Liquids, and Gases ▪ *Guided Reading and Study*

Changes of State

This section explains what happens to substances during changes of state.

Use Target Reading Skills

As you read, complete the outline about changes in state. Use the red headings for the main ideas and the blue headings for supporting ideas.

Changes in State
I. Changes Between Solid and Liquid A. Melting B.
II. Changes Between Liquid and Gas A. B. C. D.
III.

Changes Between Solid and Liquid

1. The change in state from a solid to a liquid is called _____.
2. In most pure substances, melting occurs at a specific temperature called the _____.
3. The change of state from liquid to solid is called _____.
4. Is the following sentence true or false? At its freezing point, the particles of a solid are vibrating so fast that they break free from their fixed positions. _____

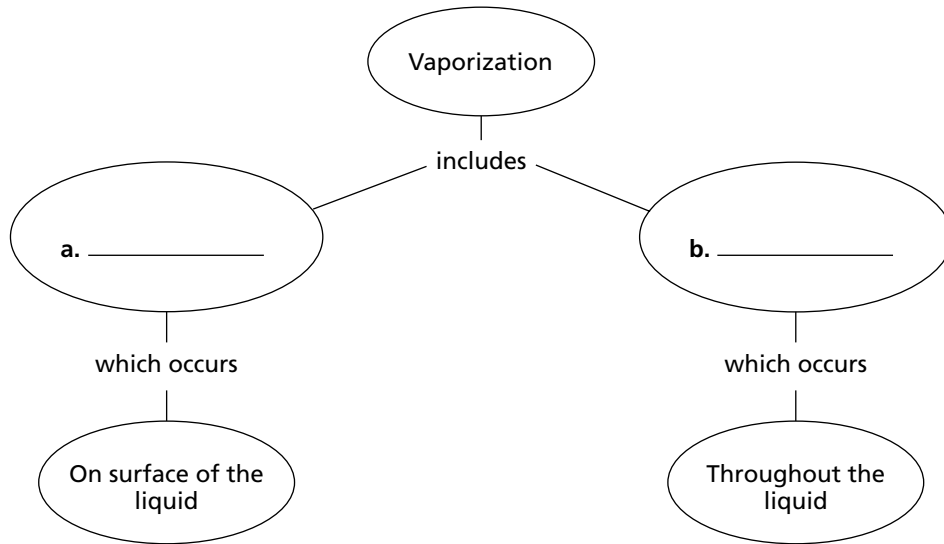
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Changes Between Liquid and Gas

5. The change from a liquid to a gas is called _____.

6. When does vaporization take place?

7. Complete the concept map.



8. Each liquid boils only at a certain temperature, which is called its _____.

9. Why is the boiling point of water lower in the mountains than it is at sea level?

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Changes of State *(continued)*

10. Is the following sentence true or false? Condensation is the opposite of vaporization. _____

11. When condensation occurs, does a gas lose or gain thermal energy?

Match the term with its example.

Term	Example
___ 12. vaporization	a. A pot of water on a stove reaches its boiling point.
___ 13. evaporation	b. Liquid water changes into water vapor.
___ 14. boiling	c. Clouds form from water vapor in the sky.
___ 15. condensation	d. A puddle dries up after a rain shower.

Changes Between Solid and Gas

16. During _____, particles of a solid do not pass through the liquid state as they form a gas.

17. Give an example of sublimation.

