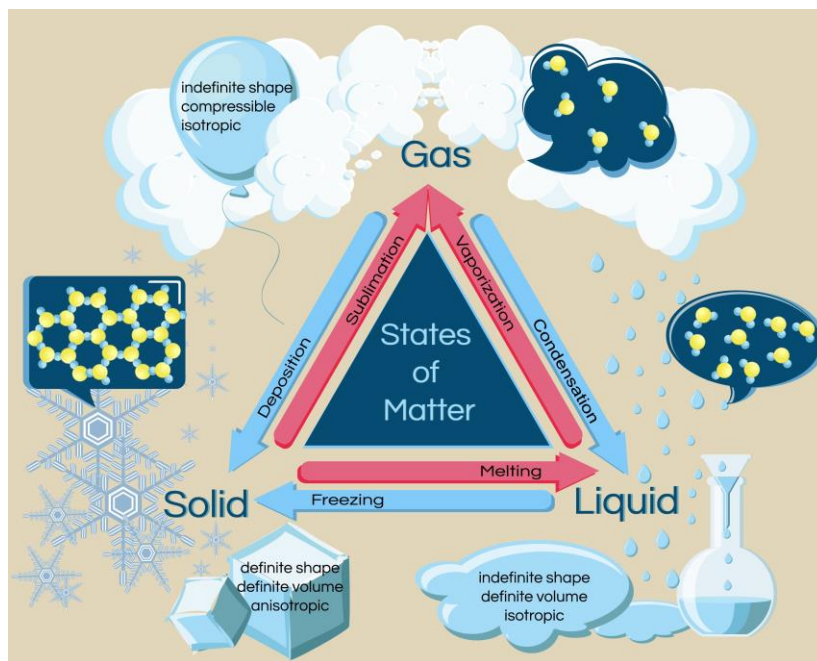


Matter

Section 5: Changes in States of Matter



Matter often changes. When enough heat is added to a liquid, it will begin to boil and turn into a gas. The bubbles are water vapor, and as more heat is added, the bubbles become larger and larger. The **boiling point** of a liquid is the temperature at which the liquid begins to vaporize. The added heat gives the molecules in the liquid more kinetic energy. **Vaporization** is the change from a liquid state to a gaseous state. Vaporization can be used to describe both boiling and evaporation. **Evaporation** is vaporization that occurs only at the surface of a liquid. It can occur at temperatures below the liquid's boiling point. For example, if you leave a cup of water unattended on the counter, the water will eventually evaporate.

When something **melts**, it changes from a solid state to a liquid state. The **melting point** is the temperature at which a solid melts. When something **freezes**, it changes from a liquid state to a solid state. The **freezing point** is the temperature at which a liquid freezes. **Condensation** occurs when there is a change from a gaseous state to a liquid state. The **condensation point** is the temperature at which gas condenses.

Review:

1. What is boiling point?
2. When does condensation occur?
3. Explain evaporation.