Name _____

The Dance of Intermolecular Forces: Solids, Liquids, and Gases

Short Answer Key

1. Intermolecular forces determine how tightly molecules are held together in a substance, influencing its physical properties such as shape, volume, and flow.
2. The main type of intermolecular force in solids is the "Van der Waals" force, which keeps molecules tightly packed together, maintaining the solid's shape and volume.
3. In liquids, intermolecular forces are weaker than in solids, allowing molecules to slide past each other. In gases, intermolecular forces are the weakest, and molecules move independently and freely.
4. Vaporization is the process where a liquid turns into a gas by breaking intermolecular forces. Molecules gain energy and move freely in the gas phase.
5. Cooling a gas causes its molecules to come closer together as intermolecular forces strengthen, leading to condensation into a liquid.