Pye Bank CE Primary DSAT Knowledge Organiser

YEAR 4 — Chemistry: Is water always wet? — SCIENCE

KEY VOCABULARY

Matter: any solid, liquid or gas that exists in the universe

Particle: an extremely small unit of matter

Water cycle: the process of water being recycled over and over again

Melting: the process of solid cooling and changing into liquid

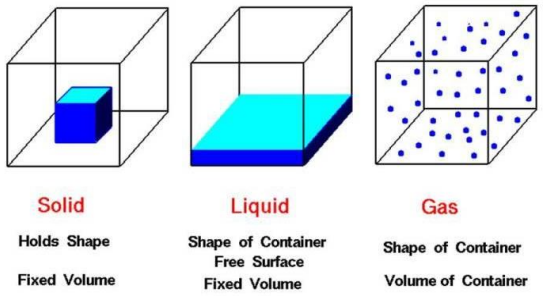
Freezing: the process of liquid cooling and changing into solid

Evaporation: the process of liquid heating and changing into gas

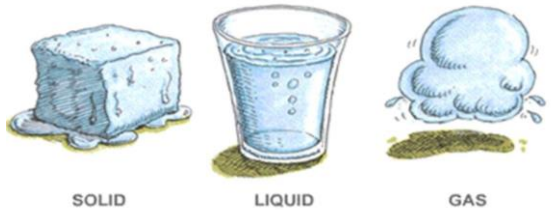
Condensation: the process of gas cooling and changing into liquid

Precipitation: liquid or solid particles that fall from the clouds as rain, sleet or snow

Temperature: how hot or cold something is



States of Matter and their Properties

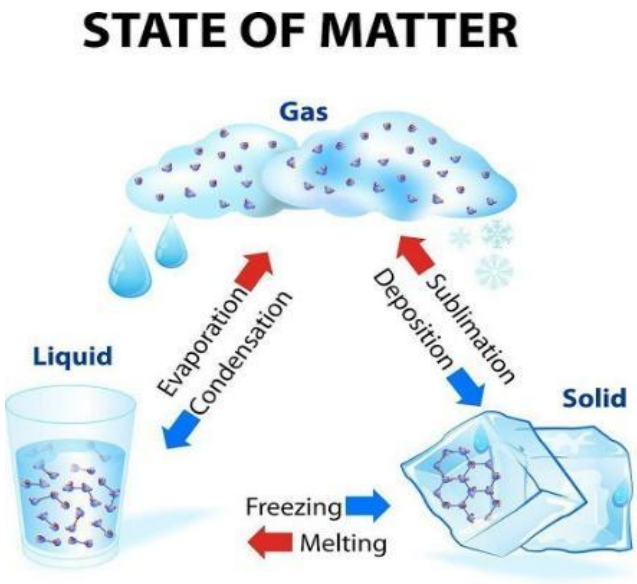


Solid: A material made of tightly bound particles that is rigid and has a definite volume and shape.
Liquid: A material made of particles with a definite volume but no fixed shape. Liquids are able to flow and take the shape of their container, but they cannot be compressed.
Gas: A fluid substance that is neither solid nor liquid. The particles are widely separated and are in constant random motion. Particles in a gas have more energy than in a liquid or solid, and move about to fill the container they are in.

STICKY KNOWLEDGE

1. Temperature is measured using °C.
2. Water boils at 100 °C and becomes water vapour.
3. Water freezes at 0 °C and becomes ice.
4. Other materials have different boiling and freezing points.
5. Heating a material makes the particles vibrate faster.
6. Cooling a material makes the particles vibrate more slowly.
7. The water cycle shows how water is constantly being changed into different states. It can move in different forms, including vapour, rain, snow or hail.
8. Clouds are made from tiny water droplets in the air. They are held up by the air and wind.
9. Types of precipitation: rain, snow, sleet, hail

KEY CONCEPT – Changes of state



KEY CONCEPT – The water cycle