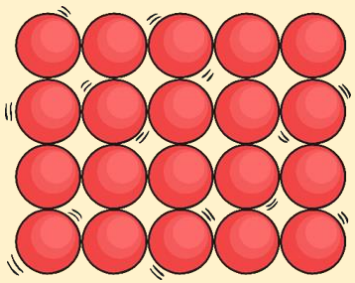
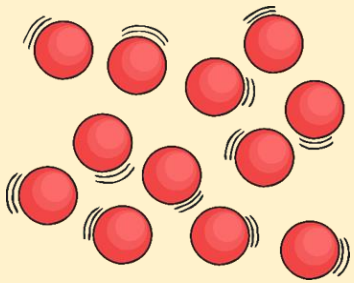
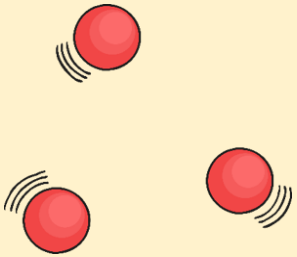
States of Matter Learning Organiser

Key Vocabulary

Solids	Materials that **keep their shape** unless a force is applied to them. Can be hard, soft or even squashy. Solids **always take up the same amount of space**.
Liquids	Take the **shape of their container**. They can change shape but do not change the amount of space they take up. They can **flow or be poured**.
Gases	Can **spread out** to completely fill the container or room they are in. Do not have any fixed shape but they do have a mass.
Water Vapour	Water that takes the form of a gas. When water is **boiled**, it evaporates into a water vapour.
Melt	When a solid changes into a liquid.
Freeze	When a liquid turns into a solid.
Evaporate	When a liquid turns into a gas.
Condense	When a gas turns into a liquid
Precipitation	Liquid or solid particles that fall from a cloud as rain, sleet, hail or snow.

Solid	Liquid	Gas
		
Particles in a solid are **close together** and **cannot move**. They can only vibrate.	Particles in a liquid are close together but **can move around** each other easily.	Particles in a gas are **spread out and can move around very quickly** in all directions.

The Water Cycle

1. Water from lakes, puddles, rivers and seas is **evaporated** by the sun's heat, turning it into **water vapour**.
2. This **water vapour** rises, then cools down to form water droplets in clouds (**condensation**).
3. When the droplets get too heavy, they fall back to the earth as rain, sleet, hail or snow (**precipitation**).