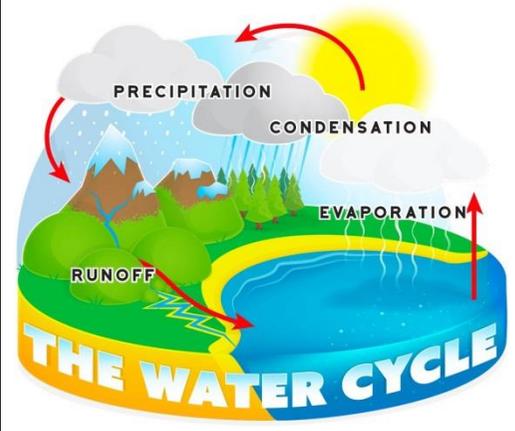


**YEAR 4 SCIENCE: MATERIALS: All matter is in the solid, liquid or fast state at room temperature but may change state when cooled or heated: States of matter**

<b>matter</b> - Any solid, liquid or gas that exists in the universe	<b>liquid</b> - <u>A substance that can flow and take on the shape of a container</u>	<b>evaporation</b> - The process of a liquid becoming a gas.	<b>particle</b> - A very small piece of matter
<b>substance</b> - Any solid, liquid, powder or gas is a substance	<b>gas</b> - <u>A substance that has no fixed shape, like oxygen.</u>	<b>condensation</b> - The process when water vapour in the air changes from a gas back into a liquid.	<b>celsius</b> - A scale for measuring temperature, in which water freezes at 0 degrees.
<b>solid</b> - <u>A substance that stays the same shape whether it is in a container or not.</u>	<b>water vapour</b> - Water that is in the form of a gas.	<b>precipitation</b> - Any rain, snow, sleet or hail that falls to earth	<b>boiling point</b> - <u>The temperature when water begins to boil (on Earth this is 100°C)</u>

**What is the water cycle?**

- 1) Energy from the sun heats up the water in our rivers, lakes and oceans.
- 2) Water evaporates into the air, turning into a gas called vapour.
- 3) The water vapour rises up into the sky where it cools.
- 4) The water vapour turns back into a liquid, forming clouds. This process is called condensation.
- 5) Eventually the water droplets in the clouds become too heavy for the air to hold them.
- 6) They fall back down to Earth as rain, snow, hail or sleet, a process known as precipitation.
- 7) The fallen precipitation is then collected in rivers that flow to the sea. This is called runoff.
- 8) The water cycle then begins again as the sun heats the water



**What are the states of matter and how can we compare and groups materials together?**

solid	liquid	gas
● rigid	● not rigid	● not rigid
● fixed shape	● no fixed shape	● no fixed shape
● fixed volume	● fixed volume	● no fixed volume
cannot be squashed	cannot be squashed	can be squashed
Solid (at room temperature)	Liquid (at room temperature)	Gas (at room temperature)
Wood Iron Copper Plastic	water milk blood oil	oxygen carbon dioxide nitrogen steam

**What happens to some materials when they are heated or cooled?**

