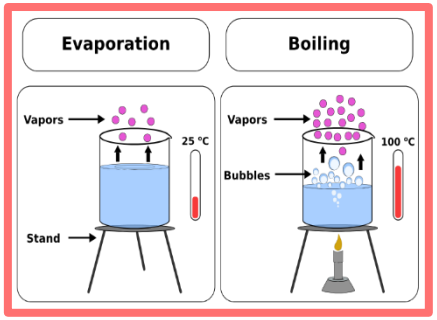
Year 4 - Science - Autumn 2 - Chemistry - States of matter

Sticky Knowledge

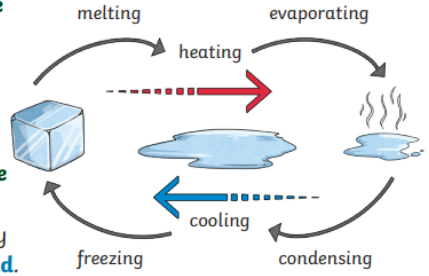
1. What are the properties of solids, liquids and gases?
2. How can we group materials? What are similarities or differences?
3. What is a pouring solid? Which materials are pouring solids?
4. What materials can melt? How can this process be sped up?
5. How do materials change their state?
6. What is condensation?
7. What is evaporation?
8. How would you measure temperature? What does °C stand for?
9. What units could be used to measure time?
10. What is the process of evaporation? How can this be increased?
11. What is the process of condensation?
12. What is the difference between boiling and evaporation?



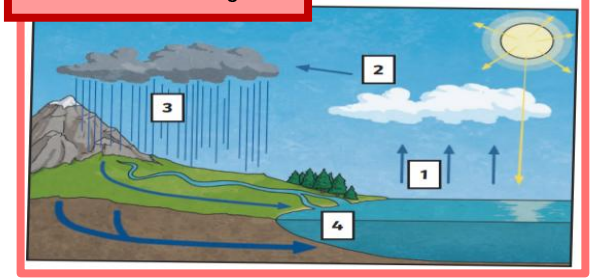
Changing State

Increasing the **temperature** of a **solid** can cause it to **melt** into a **liquid** and eventually **evaporate** the **liquid** into a **gas**.

Decreasing the **temperature** of a **gas** can **condense** it into a **liquid** and eventually **freeze** the **liquid** into a **solid**.



The Water Cycle



Key Vocabulary

solid	A state of matter with a fixed shape and volume.
liquid	A state of matter with no fixed shape but a fixed volume.
gas	A state of matter with no fixed shape and no fixed volume.
pouring solid	A solid that can be poured like a liquid
volume	The amount of space a solid, liquid or gas takes up.
oobleck	A material made from corn starch and water.
states of matter	The different forms that materials can take.
freezing	The change of state from a liquid to a solid.
melting	The change of state from a solid to a liquid.
boiling	The change of state from a liquid to a gas.
condensation	The change of state from a gas to a liquid.
evaporation	The change of state from a liquid to a gas.
thermometer	Equipment that measures temperature.
stopwatch	Equipment that measures time.
beaker	Equipment to hold a liquid.
temperature	The measure of how hot or cold something is.
melting point	The temperature a solid will melt.

Melting Point

This is the **temperature** at which a **solid** turns into a **liquid**.