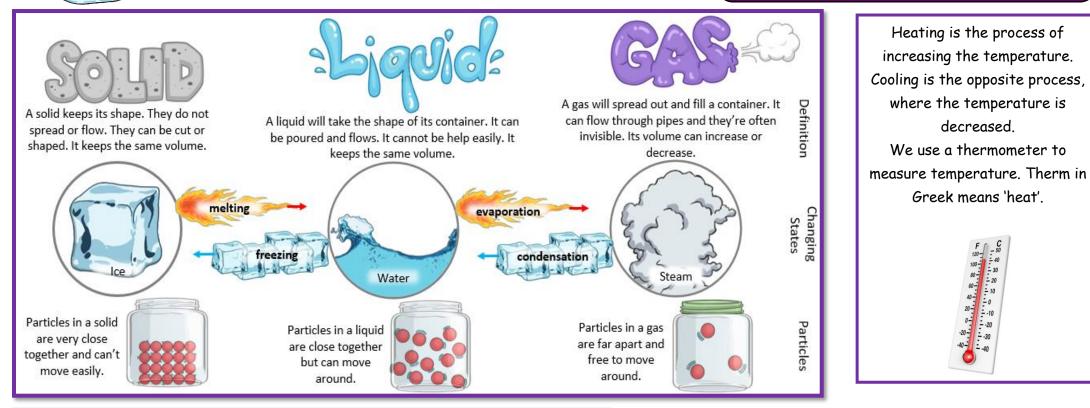
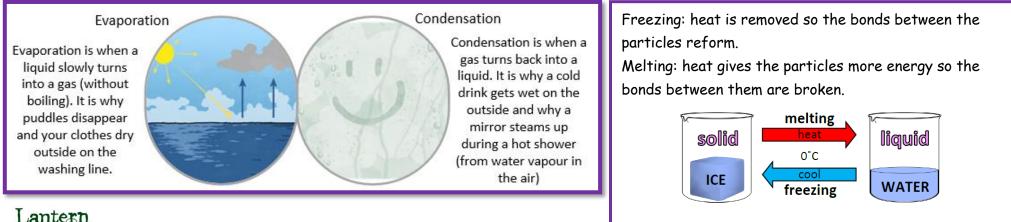


What is the difference between a solid, a liquid and a gas?

Scientists: meet the scientists at Cambridge University that are designing alloys (combinations of metals) to make parts for aircraft that have a much higher melting point.





## Working Scientifically

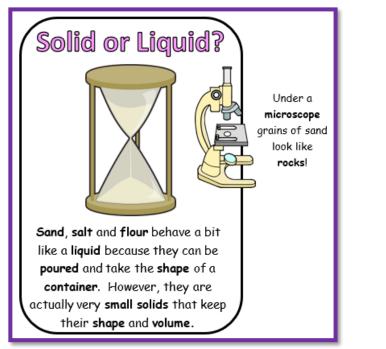
Do all materials melt at the same rate?

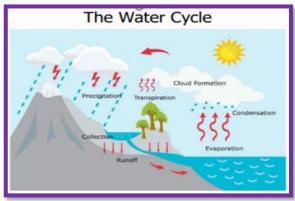
the water evaporates? What part does evaporation and condensation play in the water cycle?

How does the surface area of a pond affect the rate at which

How does temperature affect the rate of evaporation?

|               | Key Vocabulary   |
|---------------|--|
| Boiling point | The temperature at which different liquids boil and turn into a gas. |
| Condensation  | The change of water in its gas form (water vapour) into liquid       |
|               | water.   |
| Cooling       | To decrease the temperature.   |
| Evaporation   | The process of a liquid being heated and changing into a gas.        |
| Freezing      | The process of a liquid cooling and changing in state to a solid.    |
| Heating       | To increase the temperature.   |
| Matter        | Any substance (solid, liquid or gas) that has a mass and takes up    |
|               | space by having a volume. Matter is made from tiny particles called  |
|               | molecules.   |
| Melting       | The process of a liquid being heated and changing into a gas.        |
| Melting point | The temperature at which the change of state happens.                |
| Precipitation | When rain, snow or sleet falls to the ground.                        |
| Reversible    | The change of state can be reversed so the previous state is         |
|               | restored.  |
| Temperature   | How hot or cold something is (measured in degrees Celsius in the     |
|               | UK).   |
| Thermometer   | An instrument used to measure temperature.                           |
| Volume        | The amount of space that an object takes up.                         |
| Lantern       |  |





seas.

The water cycle is the continuous journey of water from the land to the sky and back to the land again. This movement of water is constant supporting life on Earth.

**Evaporation:** warmth from the sun causes water (liquid) from the sea, lakes & rivers to rise into the air and turn into vapour (gas). **Condensation:** water vapour (gas) cools and turns back into drops of water that form clouds. **Precipitation:** when the clouds get too heavy, water falls from the clouds in the form of rain, sleet or snow. **Runoff:** the majority of water that falls on the land runs-off the ground and returns to the lakes and rivers or gets carried back to the