Why do puddles disappear?

St. Peter's CE Primary Academy

Materials Y4

Key scientist – John Dalton

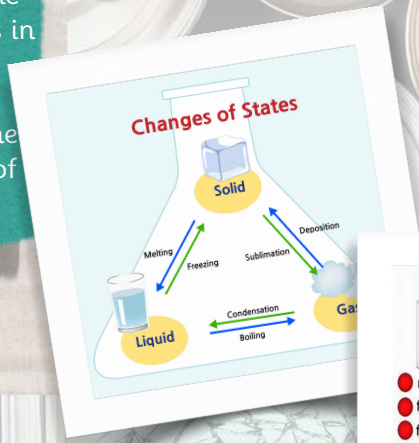
John Dalton helped us understand how tiny particles called atoms make up everything around us, including how water can change between solid, liquid, and gas.

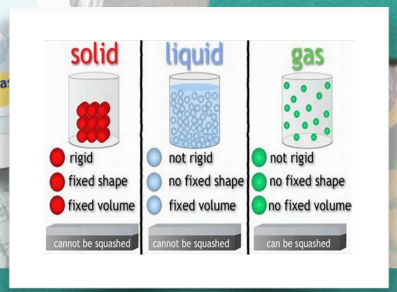
Key learning

- compare and group materials together, according to whether they are solids, liquids or gases
- observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
- identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Working scientifically focus

- Observing and measuring
- Recording data
- Making predictions





Scientific enquiry types

Identifying and classifying

Comparative and fair testing

Key vocabulary

boiling	Heating a liquid to the point where it begins to change state to a gas.
condensation	When a gas changes state to a liquid.
evaporation	When a liquid changes state to a gas.
freezing	The process of a liquid changing state to a solid
gas	state of matter which flows, can spread out and be squashed
liquid	state of matter which flows and forms a pool
matter	anything which takes up space and has a mass
melting	The process of a solid changing to a liquid
particle	One very small piece of matter
precipitation	Rain, snow, sleet or hail.
solid	state of matter which holds its form and shape
transpiration	When water evaporates from the surface of leaves.
water vapour	Water in the form of a gas.

Materials – Our Learning Journey

Year 1/2

- Name, describe and group different types of everyday materials based on simple properties
- Identify the suitability of the materials for particular uses

Year 3/4

- Solids, liquids and gases and changes of state
- The water cycle
- Conductors and insulators

Year 5/6

- Comparing and grouping materials based on specific properties
- Dissolving and solutions
- Separating mixtures through filtering, sieving and evaporating
- Reversible and irreversible changes

Ethics

Should there be a limit on how much water people can use?