

Newton Road School

Unit: states of matter

Chemistry

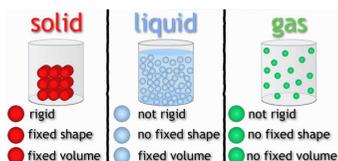
Year: 3/4

What I will know...

- A solid keeps its shape and has a fixed volume. A liquid has a fixed volume but changes in shape to fit the container.
- A liquid can be poured and keeps a level, horizontal surface.
- A gas fills all available space; it has no fixed shape or volume. Melting is a state change from solid to liquid. Freezing is a state change from liquid to solid. The freezing point of water is 0oC.
- Boiling is a change of state from liquid to gas that happens when a liquid is heated to a specific temperature and bubbles of the gas can be seen in the liquid. Water boils when it is heated to 100oC.
- Evaporation is the same state change as boiling (liquid to gas), but it happens slowly at lower temperatures and only at the surface of the liquid.

What I already know...

- I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
- I have found out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.



Vocabulary

air	the invisible gas surrounding the earth, a mixture mainly of oxygen and nitrogen
solid	firm and stable in shape; not liquid or fluid
liquid	a substance that flows freely
gas	a substance or matter in a state in which it will expand freely to fill the whole of a container
oxygen	a colourless, odourless reactive gas
heating	Heat is the form of energy that is transferred between systems or objects with different temperatures
cooling	Cooling is removal of heat
Water vapour	Water vapor is the gaseous phase of water
crystals	A solid material arranged in a definite pattern
Change state	Any change of a substance from one physical state (solid, liquid or gas) to another.
Boil/boiling point	Boiling is the rapid vaporization of a liquid
Melt/melting point	Melting , change of a solid into a liquid when heat is applied.
freeze	a liquid turns into a solid when its temperature is lowered below its freezing point
solidify	to make solid
degrees Celsius,	a unit of temperature on the Celsius scale, a temperature scale
temperature	measure of hotness or coldness