


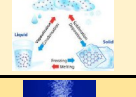
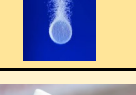




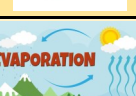


Knowledge Organiser





Vocabulary

picture	key word	definition
	material	what something is made of
	property	a quality of a material
	state	solid, liquid or gas
	change of state	a change from one state (solid, liquid or gas) to another
	dissolve	when a solid mixes with a liquid to create a new liquid
	melt	when a solid becomes a liquid
	reversible change	a change that can be changed back to its original state
	irreversible change	a change that cannot be changed back to its original state
	filter	a device to separate solid parts from liquid
	evaporation	the process of a liquid changing to a gas

Key Facts

- A mixture is formed when two or more materials have been mixed and are physically not chemically combined. They can be separated by physical means (sieving, filtering, evaporation, etc).
- A chemical change is a change during which new materials are formed. Many of these chemical changes are not reversible. •
- When materials dissolve they form a solution. The solid material is called the solute and the liquid is called the solvent.

Reversible and irreversible changes

<p>Reversible Changes</p> 	<p>Irreversible Changes</p> 
<p>Butter melting</p> 	<p>Sugar dissolving in tea</p> 

Further Reading

- National Geographic Kids - [https:// www.natgeokids.com/uk/](https://www.natgeokids.com/uk/)
- BBC Bitesize - <https://www.bbc.co.uk/bitesize/topics/zcvv4wx>

GLUE ME

What I am expected to know from the National curriculum

- to compare and group together materials based on their prosperities
- to know that some materials will dissolve and how to recover a substance from a solution
- to know how mixtures might be separated
- to give reasons why certain materials are used to perform specific roles
- to demonstrate that dissolving, mixing and changing state are reversible changes
- to know that some changes result in a new material and this usually cannot be reversed

• QR code for end of unit assessment:



QUESTIONS TO DEEPEN YOUR LEARNING

Character	Critical Thinking	Creativity	Communication	Citizenship	Collaboration
Can you find a reversible change?	Are reversible changes always reversible?	Can you create an investigation for a reversible change?	Can you explain to a classmate how changing state happens?	Can you create an information video on changing state?	Can you work with another person to ensure a fair test is carried out?