

Key Vocabulary

thermal, electrical, conductor, insulator, reversible change, dissolving, melting, soluble, insoluble, magnetism, reflective, transparency, flexibility, permeability, absorbent, flammability, hardness, natural, man-made condensation, distillation, vapour, gas, liquid, solid, solidifying, evaporation

Questions for experts

Challenge yourself...

Explore how different substances may be separated based on their density.

<https://www.stem.org.uk/resources/elibrary/resource/33255/suspended-ice>

Where can this take you in the future?

You could pursue one of these careers...

Engineer OR Chemist OR
Lecturer OR Mechanic

Conceptual Science Knowledge – Properties and Changes of Material

Natural means something can be found and it not made by humans.

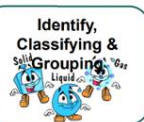
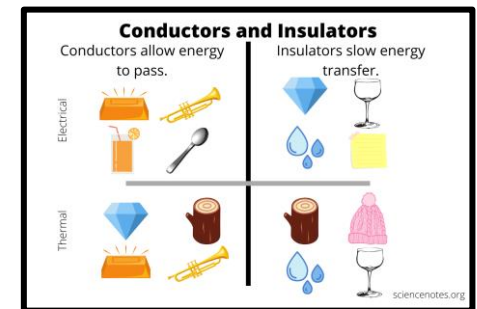
Manmade is the opposite of natural and is made by humans.

Some manmade materials are created using natural materials.

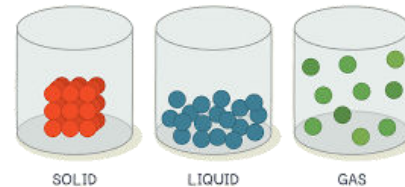
Heat is the movement of energy.

Temperature measures how hot or cold something is.

Hot particles move faster than cold particles.



Chemistry



Working Scientifically Knowledge – Observing over time

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations

Domain Knowledge (references all facts children will need to access learning)

It will be helpful to know...

- There are three states of matter; solids, liquids and gases
- Changes of evaporation and condensation
- Everyday materials (eg, wood, plastic, glass, metal, water and rock) and their properties

STEM links to try at home

States of matter
<https://www.bbc.co.uk/bitesize/topics/zgwc96f>

Trips and visits

We The Curious