

# Knowledge Bank: Year 5 Science – Materials

### Key Vocabulary:

Definition
The substance that something is
made out of.
What a material is like e.g. hard,
soft.
A state of matter which holds its
shape e.g. wood and glass.
Liquids are another state of
matter that can flow and take
the shape of the container.
Gas is the third state of matter
and is free to move around.
Bending easily without breaking.
A material that allows liquid or
gases to pass through it.
Designed to keep you warm by
preventing heat to escape.
When a liquid turns into a gas or
vapour.
When a gas, such as water
vapour, cools and turns into a
liquid
A conductor is a material that
heat or electricity can easily
travel through.
An insulator is a material that
does not let heat or electricity
through.

#### Images:





## What I should already know:

- Materials have names and properties.
- Different materials have different uses.
- Materials can be compared and grouped based on their states of matter.

• States of matter can be observed through heating, freezing, evaporation and condensation.

## Key Facts:

- Different materials are used for particular jobs based on their properties.
- Metals are good conductors as they let heat or electricity easily pass through.
- Some materials are thermal insulators as they do not easily let heat or electricity pass through.
- It is possible to change between solid, liquid and gas through heating, cooling, condensing and evaporation.
- The properties of the material will be different when changing between states. (colour, state texture, hardness, smell, temperature).
- Irreversible changes often result in a new product being made from the old materials.
- If it is not possible to get the material back easily, it is likely that it is not there anymore and something new has been made (irreversible change).