Key Vocabulary

Dependent variable	The variable that is being measured.
Independent variable	The variable that is being changed.
Impermeable	Not allowing fluid to pass through.
Permeable	Allowing fluid to pass through it.
malleable	Can be shaped when pressure is applied.
brittle	Easily broken if pressure is applied.
durable	Can be stretched or rolled until very thin.
Viscosity	How fast or slowly a liquid will flow; how thick or thin a liquid is.
Thermal conductor	A material which transmits heat well,
Thermal insulator	A material which does not transfer heat easily.



Properties and Uses of Materials

In this module, children will:

- **Compare and group together everyday materials on the basis of their properties, including their hardness, transparency, conductivity and response to magnets**
- **give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.**

Meet the inventor – Bei Ning Koh

Bei Ning Koh is an inventor. She invented an itch reliever that never scratches people's skin. She designed to help people with eczema.







Key Facts

1. Materials have properties which make them suitable for different purposes.
2. Materials are used in many ways and for particular purposes based on their properties.
3. Liquids have properties which include having: an ability to flow, a level of viscosity and they take on the shape of a container.
4. Inventors discover new uses for materials and create new materials. Inventors design objects using their knowledge of the properties of materials.
5. A thermal insulator is a material that provides high resistance to heat flow.
6. A thermal conductor is a material that provides low resistance to heat flow.

Background Knowledge

Children will know:

- **about the properties of solids, liquids and gases.**
- **evaporation and condensation and the part played in the water cycle**
- **how a thermometer works and how it can be used to measure temperature**
- **which materials are electrical conductors and electrical insulators**
- **about magnets**
- **about human impact on the environment**