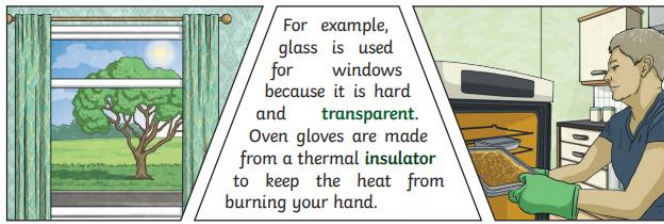


PROPERTIES OF MATERIALS



- A **conductor** is a material that transfers heat very well.
- Metals are typically good conductors.
- An **insulator** is a material that is a poor conductor of heat.
- Wood, paper, and plastic foam are examples of good insulators.



Key vocabulary	Definition
Material	The substance that objects are made of.
Hard	Not easily bent, broken, scratched or pierced.
Transparent	Allows light through and can be seen through.
Conductor	Allows the transfer of energy. (Heat or electricity).
Insulator	Reduces or stops the transfer of energy. (Heat or electricity).
Magnetic	Is attracted towards a magnet.
Flexible	Can be bent.
Thermometer	A device for measuring temperature.
Absorbent	Able to soak up water.

Key Knowledge and Understanding:

Compare and group together everyday materials on the basis of their properties, including their hardness, transparency, conductivity (electrical and thermal), 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.

Compare a variety of materials and measure their effectiveness (e.g. hardness, flexibility, transparency, thermal conductivity, electrical conductivity).

Investigate how absorbent different papers are.

Know that heat always moves from hot to cold.

Some materials (insulators) are better at slowing down the movement of heat than others.

Objects/liquids will warm up or cool down until they reach the temperature of their surroundings.

Investigate thermal insulators and conductors.

Investigate electric insulators and conductors.

Name some insulators.

Name some conductors.

Use a thermometer with accuracy.

hard not easily broken or pierced A hard diamond.	squashy easily crushed or squeezed The play dough is squashed.	smooth an even and regular surface Some smooth pebbles.
absorbent able to soak up liquid The sponge is absorbent.	bumpy uneven, raised patches This shell is bumpy.	opaque cannot be seen through She is hidden by the opaque screen.
rigid unable to be bent or forced out of shape Stone is rigid.	transparent can be seen through This glass is transparent.	soft not firm to the touch The kitten has soft fur.
flexible able to bend A flexible spring.	rough uneven, irregular surface The log has rough bark.	waterproof repels water and liquids A waterproof coat.

