

Key Vocabulary	
Transparent	Allowing light to pass through so that objects behind can be distinctly seen.
Translucent	Allowing light, but not detailed shapes, to pass through.
Opaque	Not able to see through.
Rigid	Not able to bend or be forced out of shape.
Flexible	Capable of bending easy without breaking.
Fragile	Easily broken or damaged.
Durable	Able to withstand wear, pressure or damage without breaking.
Conductors	A material which does allow heat and/or electricity to pass through it.
Insulators	A material which does not easily allow heat and/or electricity to pass through it.
Attract	To cause something to come towards something else.
Repel	Force back or away from something.

Key Knowledge
 Different **materials** are used for particular jobs based on their properties: electrical **conductivity**, flexibility, hardness, **insulators**, magnetism, solubility, thermal **conductivity**, **transparency**.



For example, glass is used for windows because it is hard and transparent. Oven gloves are made from a thermal insulator to keep the heat from burning your hand.



Magnetism is the force exerted by magnets when they attract or repel each other. Magnetism is caused by the motion of electric charges.

Electricity can flow through the components in a **complete** electrical circuit.
 A circuit always needs a **power source**, such as a battery, with wires connected to both the positive (+) and negative (-) ends. Adding a conductor to a circuit will still allow electricity to pass through.

