Science Knowledge Organiser

What do we already know?

We know names of materials and can name the material an object is made from. We have an understanding of simple properties

Key Vocabulary	
materials	**Materials** are what objects are made from.
suitability	**Suitability** means having the **properties** which are right for a specific purpose.
properties	This is what a **material** is like and how it behaves (soft, stretchy, waterproof).

FORCE

Squash an object by pushing both hands together.



Bend an object by grabbing both ends of the object and bringing the ends inwards together.



Twist an object by turning your hands in opposite directions.



Stretch an object by pulling your hands slowly and gently apart.



Key Knowledge

Properties of Materials



wood: hard, rigid, strong, opaque, can be carved into any shape, flammable.



glass: waterproof, transparent, hard, smooth, non-flammable



plastic: waterproof, strong, can be made to be flexible or stiff, smooth or rough.



metal: strong, hard, waterproof.



paper: lightweight, flexible. flammable



cardboard: strong, light, rigid, flammable.



fabric: soft, flexible, can be stretchy, warm, absorbent, flammable.



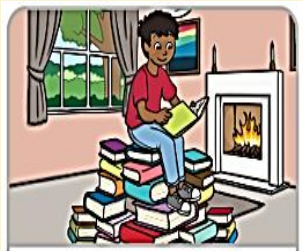
rubber: hard-wearing, elastic, flexible, strong.

Key Vocabulary	
object	A thing that can be used. For example a door, chair, car, table are all **objects**.
material	**Materials** are what an **object** is made from.
hard	Not easily broken or bent.
soft	If something is **soft**, it is easy to cut, fold or change the shape of.
stretchy	Can be pulled to make it longer or wider without breaking.
shiny	Reflects light easily.
dull	Doesn't reflect light. Doesn't look bright or **shiny**.
rough	If something is **rough**, it feels and looks uneven or bumpy.


Plastic toys


Wooden furniture


Metal tools


paper books


Brick house

flammable - it is easily set on fire

non-flammable - not able to set on fire


Drinking water


Glass window


Fabric clothing


stepping stones

smooth	**Smooth objects** have no lumps or bumps.
flexible	Flexible things can be bent easily into a curved or folded shape.
rigid	If something is rigid it can't be bent easily into a curved or folded shape.
waterproof	If something is **waterproof**, it keeps water out. It keeps things dry.
not waterproof	**Not waterproof materials** let water in.
absorbent	If something is **absorbent**, it soaks liquid up.
not absorbent	If something is **not absorbent**, it does not soak up liquid.
transparent	**Transparent objects** can be seen through.
opaque	**Opaque objects** can't be seen through.