

Science Knowledge Organiser - Year 2

Unit: What materials are objects made from and why?

Key Vocabulary:

absorbent

Something is **absorbent** if it soaks up liquid easily.

malleable

Malleable things can be pressed into shape without bending or cracking.

material

Materials are what things are made from.

object

Objects are things that can be seen and touched.

opaque

Opaque objects cannot be seen through.

properties

Properties are characteristics that are used to describe what things are like.

purpose

The **purpose** of something is the reason why it exists.

suitable

If something is **suitable**, it is right for a particular purpose.

transparent

Transparent objects can be seen through.

waterproof

Waterproof items do not allow water to pass through them.

Science Skills:

- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials, on the basis of their simple physical properties.
- Use observations and ideas to suggest answers to questions.
- Ask simple questions and recognise that they can be answered in different ways.
- Identify and classify.
- Perform simple tests.

Key Facts:

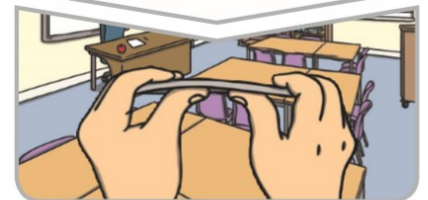
- **Materials** are used to make the **objects** we use and see.
- Not all **materials** have the same **properties**.
- Some **materials** are more **suitable** than others, due to their **properties**.
- Some **materials** are **unsuitable** for certain **purposes** because they may not have the right **properties**.

Squash an object by pushing both hands together.

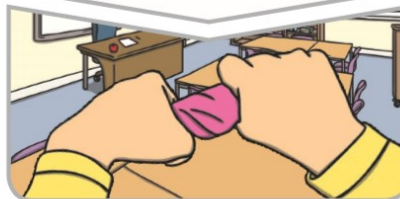


Do all **materials** behave the same way, when you squash, bend, twist or stretch them?

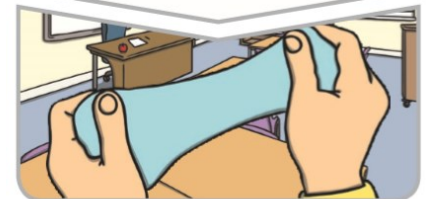
Bend an object by grabbing both ends of the object and bringing the ends inwards together.



Twist an object by moving your hands in different directions.



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



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Properties of Materials



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



glass:
waterproof,
transparent,
hard,
smooth.



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



paper:
lightweight,
flexible.



cardboard:
strong, light,
stiff.



metal:
strong, hard
easy to wash.



fabric:
soft, flexible,
hard-wearing,
can be stretchy,
warm, absorbent.



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