



Key Vocabulary

material	A substance used to make something.
properties	An attribute, quality or characteristic of a material.
waterproof	A material which keeps you dry and doesn't let water in.
rigid	When something is impossible to bend.
flexible	When something can bend easily without being broken.
durable	When something lasts a long time.

Key Facts

- Materials can have properties such as durability, flexibility and waterproofing.
- Materials can be grouped together with other materials that share the same properties.
- Materials need to be suitable for their use. You wouldn't want to use paper for a bathing suit!
- Some solid objects can have their shapes changed by bending, squashing and stretching. Sometimes this changes the object permanently.

Key Questions

- What properties does a material have?
- Why can a material have more than one use?
- Can a material have more than one property?
- How can you group materials based on their properties?
- Should a material's properties influence its uses?
- What links can be made between different properties?

Links to other Learning

- Year 1 - Everyday materials
Distinguish between an object and the material it is made from
- Year 3 - Rocks
Compare and group rocks based on their physical properties
- Design and Technology
Using materials that are fit for purpose

Squashing, Bending, Twisting and Stretching



Some solid objects can have their shape changed by squashing, bending, twisting and stretching.

Famous Scientist

John Dunlop
1840-1921

John Dunlop was a Scottish inventor and vet who invented the air-filled rubber tyre. His invention is still used today in car tyres and was also used to improve the bicycle.

