

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)

People who invented new materials

John Dunlop originally used rubber to make tyres for his son's tricycle.

Charles Macintosh invented the first waterproof fabric by painting a dissolved rubber solution onto cloth.

Key knowledge

Properties of Materials

wood: hard, stiff, strong, 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.	metal: strong, hard, easy to wash.
paper: lightweight, flexible.	cardboard: strong, light, stiff.
fabric: soft, flexible, hard-wearing, can be stretchy, warm, absorbent.	rubber: hard-wearing, elastic, flexible, strong.

I will be able to

- Identify and compare the suitability of a variety of everyday materials for particular uses
- Find out how the shape of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Squash an object by pushing both hands together.



Twist an object by turning your hands in opposite directions.



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



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



Investigation

What would be the best waterproof material to protect equipment in the Antarctic?