

## Key Learning

Objects can be made of different materials.

Materials include wood, metal, plastic, glass, brick, rock, paper and cardboard.

Materials have different properties.

Material properties include the ability to float, to be stretched, to be squashed, transparency and attraction to a magnet.

A material can be tough, flexible, rigid, waterproof, absorbent, light, heavy, strong, transparent, opaque, insulating, smooth, rough, fragile or reflective.

Objects can be made of more than one material.

Objects made by humans are made of materials chosen for their properties.

## Key Vocabulary

natural	Occurs in nature, can be found naturally
manmade	Made by people
transparent	Lets all the light through it – see through
opaque	Does not let light through it
flexible	Can bend easily
rigid	Cannot bend easily
waterproof	Does not allow water to go through the material
reflective	Shiny and shows a reflection – like a mirror
properties	A way to describe something.
suitability	Why a material is chosen for its purpose.
materials	What an object is made from.

## Inventors

**John Dunlop (1840-1921)** Developed air filled rubber tyres.

**Charles Macintosh (1766-1843)** Invented waterproof fabrics.

**John Loudon McAdam (1756-1836)** Invented a new way of building roads.

## Changing the shape of materials



twist



bend



stretch



squeeze

## Names of materials

wood, plastic, glass, metal, water, rock, rubber, brick, paper, card, fabric

## Working Scientifically

- Perform simple tests
- Observe closely using simple equipment
- Gather and record data to help answer questions

