

Books we will read:

Toby and The Great Fire of London.

The Great Fire of London (Anniversary edition).



KS1 Science Summer Materials – Comparison and Changes in Shape

Sticky Knowledge...

Objects can be changed by the effect of forces. They bend, squash, twist and stretch.

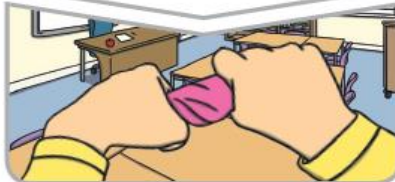
Squash an object by pushing both hands together.



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.



Force: A push or a pull or a combination of these, such as a twist.

Reversible: No new materials have been made and the original material can be recovered. For example, freezing water to make ice.

Irreversible: A change that cannot be changed back again. A new material has been made.

Scientific Vocabulary

Flexible	Able to bend and return back to an original shape.
Opaque	Does not allow light to pass through. Examples include metals, wood and concrete.
Translucent	Allowing some light to pass through. Examples include tissue paper and sunglasses.
Transparent	Allowing light to pass through. Transparent materials are 'see through'. Examples include glass and certain plastics such as cling film.
Waterproof	Something that keeps water out.
Absorbent	Able to soak up a liquid or a gas.
Conductor	A material that allows energy (heat or electricity) to pass through it easily. Metals are good conductors.
Insulator	A materials that does not allow electricity, heat or sounds to pass through it easily.. Rubber, plastic and wood are insulators.

Material: anything made of matter that can be shaped or manipulated in order to make something.

Matter: anything that physically takes up space and has mass.
E.g. solids, liquids and gases.

Suitability: 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).

Key Skills and Outcomes

- 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
- identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Reversible and Irreversible Changes

