

Subject Specific Vocabulary

Object	Thing or person
Material	Materials are what objects are made from.
Properties	This is what a material is like and how it behaves (soft, stretchy, waterproof)
Opaque	Not letting light through
Transparent	Light completely passes through it
Translucent	Clear enough that some light passes through it but not completely.
Non/reflective	When light bounces off an object. When light doesn't bounce off an object.
Rigid	Not flexible – not easily moved. Stiff.
Flexible	Easily bent without breaking.
Shape	Change the shape of an object using a force.

Sticky Knowledge

All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside and waterproof so that it holds the water. When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying activities. A material can be suitable for different purposes and an object can be made of different materials.

Objects made of some materials can be changed in shape by bending, stretching, squashing and twisting. For example, clay can be shaped by squashing, stretching, rolling, pressing etc. This can be a property of the material or depend on how the material has been processed e.g. thickness.

Year 2 – Uses of everyday materials

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.

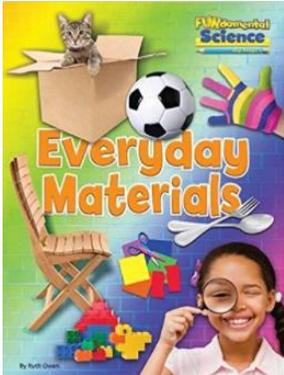
(National Curriculum, 2014)

Properties of Materials

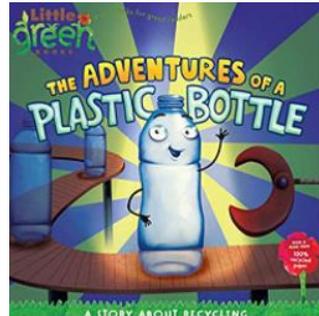
	wood: hard, stiff, strong, opaque, can be carved into any shape.		glass: waterproof, transparent, hard, smooth.
	plastic: waterproof, strong, can be made to be flexible or stiff, smooth or rough.		metal: strong, hard, easy to wash.
	paper: lightweight, flexible.		cardboard: strong, light, stiff.
	fabric: soft, flexible, hard-wearing, can be stretchy, warm, absorbent.		rubber: hard-wearing, elastic, flexible, strong.

Books that you could read if you like this topic.

Everyday Materials –
Ruth Owen



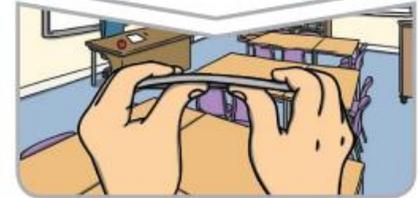
The Adventures of a
Plastic Bottle – Alison
Inches



Squash an object by pushing both hands together.



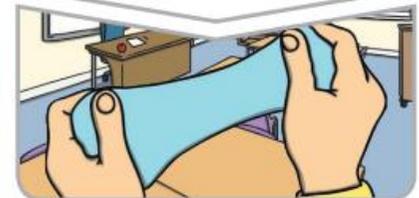
Bend an object by grabbing both ends of the object and bringing the ends inwards together.



Twist an object by turning your hands in opposite directions.



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



Websites you can visit if you like topic

EVERYSCHOOL

<https://www.everschool.co.uk/science-key-stage-1-materials.html>

ASE – Topic example work

<https://www.ase.org.uk/resources/y2-everyday-materials-max>

HAMILTON TRUST

<https://www.hamilton-trust.org.uk/science/year-2-science/everyday-materials-materials-matter/>

School Values

British Values

Why plastic can be recycled

Responsibility

Looking after the environment with the materials we use