

# Materials

# Knowledge Organiser

## Vocabulary

Word	Meaning
<b>materials</b>	Materials are what objects are made from.
<b>suitability</b>	Having the properties that are right for a specific purpose.
<b>properties</b>	This is what a material is like and how it behaves. (flexible, absorbent)
<b>purpose</b>	What is it used for
<b>transparent</b>	See through
<b>translucent</b>	Material that lets light through but can't see shapes/objects
<b>opaque</b>	Not see through (opposite of transparent)
<b>flexible</b>	Can be bent easily without breaking
<b>rigid</b>	Cannot be bent
<b>shape changed</b>	Materials can be changed by twisting/bending/squashing/stretching
<b>natural</b>	Material that is found in the environment
<b>manmade</b>	Material manufactured (made in a factory)
<b>recycle</b>	When a material gets used again and turned into something new

# Science

## Changing Materials

Some materials are flexible and we can change their shape. We can change their shape in different ways.

	<p><b>Squashing</b> Pressing, squeezing and crushing so that something becomes flat or changed into a different shape.</p>	<p><b>Bending</b> Changing something that is straight in to a curve or at an angle.</p>
	<p><b>Stretching</b> Pulling something to make it wider or longer but without tearing it.</p>	<p><b>Twisting</b> Made into a curled shape by holding and moving around in different directions at the same time.</p>

## Properties of Materials

<p><b>Paper</b> Lightweight, flexible, translucent</p>	<p><b>Stone</b> Hard, solid, strong, opaque</p>
<p><b>Fabric</b> Soft, flexible, hard-wearing, absorbent, warm</p>	<p><b>Rubber</b> Hard-wearing, elastic, flexible, strong</p>

<p><b>Wood</b> Hard, stiff, strong, opaque, can be carved into shapes</p>	<p><b>Glass</b> Waterproof, transparent, hard, smooth</p>
<p><b>Plastic</b> Waterproof, strong, flexible or stiff, smooth or rough</p>	<p><b>Metal</b> Strong, hard, easy to wash</p>

# Year 2 Autumn Term

## Where materials come from

Materials are either natural or manmade. This is how we know where the materials came from.



### Natural Materials

These are materials that are found in the environment around us. They are things that grow or are dug up out of the ground.

### Manmade Materials

These are materials that are made in factories. Other materials have to be changed in some way to make them.



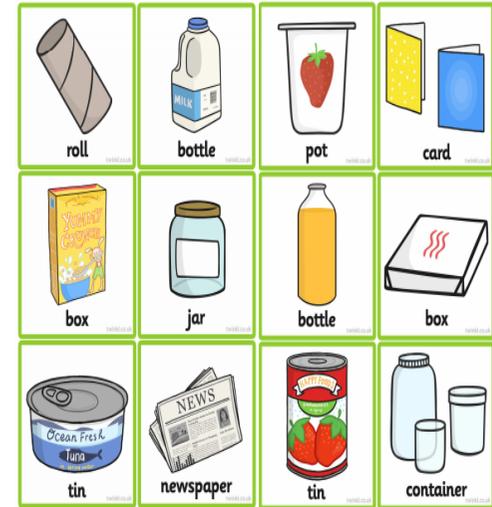
## Materials

### Recycling



A lot of the materials that we use every day can be recycled. This means that we use it again and again so that we are not wasting materials.

The items that we recycle often get collected and taken away to factories where they are turned into new things for us to use again.



### Extending your learning

#### 5 things you could do at home to extend your learning:

1. Build a boat from recyclable materials to bring to school to test if it floats.
2. Make shelter that will keep you dry in the rain—think about the best materials to do that.
3. Make a collection of materials and sort them in different ways.
4. Visit the Science Museum in London to find out more about recycling.
5. Visit your local recycling centre.