

## Umbrella question

Why do we use different materials to make different things?

### Hinge questions

- What are some common materials we see around us, and how do we use them in our everyday lives?  
Can you find some materials in the classroom and describe how they feel, look, or sound?  
What happens if we bend, stretch, or twist different materials, and which ones change easily?  
Which material would be best for making an umbrella, and why do you think it would work well?  
Can we sort these materials into groups based on whether they come from plants, animals, or are man-made?

### Key Knowledge

Some **materials** can change shape when you squash, bend, twist or stretch them. **Materials** that are soft, bendy or stretchy are often easier to change the shape of than **materials** that are hard, **rigid** or **strong**.

## Key Vocabulary

<b>material</b>	A <b>material</b> is what something is made of, such as wood or plastic.
<b>suitability</b>	<b>Suitability</b> means having the right <b>properties</b> for a certain use.
<b>properties</b>	The <b>properties</b> of a <b>material</b> tell us what it is like and how it behaves, such as whether it is soft, rough or transparent.
<b>recycle</b>	To <b>recycle</b> means to change waste (rubbish) into a <b>material</b> that can be used again.
<b>recyclable</b>	If a <b>material</b> is <b>recyclable</b> , it means it can be recycled. Not all <b>materials</b> are <b>recyclable</b> .

### Key Vocabulary

<b>strong</b>	<b>Strong materials</b> do not change shape or break easily.
<b>flexible</b>	<b>Flexible materials</b> can <b>bend</b> easily without breaking.
<b>breakable</b>	<b>Breakable materials</b> can break easily.
<b>brittle</b>	<b>Brittle materials</b> are often hard and <b>rigid</b> . They can break easily, for example when <b>bent</b> .
<b>rigid</b>	<b>Rigid materials</b> do not <b>bend</b> easily.
<b>tough</b>	<b>Tough materials</b> do not break or crack easily.
<b>translucent</b>	If a <b>material</b> is <b>translucent</b> , some light passes through it. You might be able to see through the <b>material</b> but not clearly.

### Uses of Everyday Materials

Some materials are used for more than one thing. For example, metal is used to make all of these things.



Different materials can be used to make the same thing. For example, spoons can be made of different materials.



The properties of a **material** affect their **suitability**, making them either suitable or unsuitable for particular uses.