

Key Vocabulary	
material	what something is made of
fabric	a material created by knitting or weaving fibres together
natural material	a material that comes straight from something in nature
human-made material	a material that is made by people
recycle	to change waste into a material that can be used again
smooth	feels and looks even
rough	feels and looks uneven
flexible	bends easily without breaking
rigid	does not bend easily
brittle	breaks easily
rock	a material that can be hard or crumbly
stone	a small rock
pebble	a stone that has been worn smooth by water
brick	a human-made material often used for building

transparent	light can pass through
translucent	some light passes through
opaque	light does not pass through
hard	less likely to be dented or scratched
soft	easy to cut, fold or change the shape of
shiny	smooth and reflects light
dull	does not reflect light well
squash	crush or squeeze with force
bend	force something into a curved shape
twist	force something into a curled or changed shape
stretch	pull something into a longer shape without it breaking
tough	does not break or crack easily
lightweight	does not weigh very much, is quite thin
strong	does not change shape or break easily
absorb	to take liquid in
waterproof	keeps water out
light	may be easy to pick up

Natural Materials

Natural materials are found naturally around us. They could come from the Earth, plants or animals.



sand



wool



wood

Human-Made Materials

Often, humans take a **natural material** and change it and make it into a new **material**.



bricks

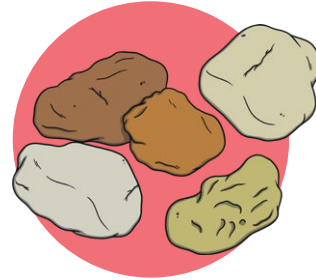


some metals

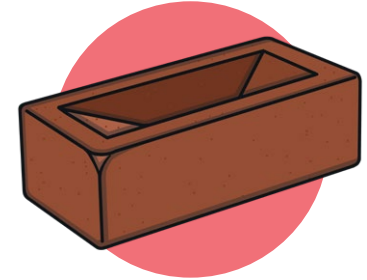


glass

Rocks and Bricks



Rocks are a **natural material**. They can be heavy, **light**, **smooth**, **rough**, **hard** or crumbly. They can be used to make buildings and for decoration.



Bricks are a **human-made material** usually made of clay. They are very **hard** and **strong**, have straight sides and can make an even wall so are often used to build houses.

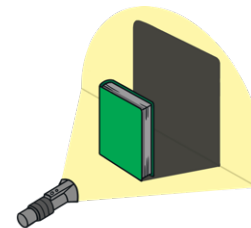
Recycling

Recycling helps the environment. Things that are **recycled** can then be used again. Wood, paper and glass can all be **recycled**.



Transparent, Translucent and Opaque

Transparent materials can be seen through. Windows need to be seen through so they are made of glass, which is usually **transparent**.



Opaque materials cannot be seen through.



Translucent materials are a good choice for when we need to let some light through. We can see through some **translucent materials** but not all.

Metals

Some types of metal can be found naturally and others are human-made.

Metal can be shaped in lots of different ways. It can be made very thin or very thick and is often used to make things that need to be very **tough**.

Metals usually let heat pass through them. Most metals are solid at room temperature but can be melted when heated up to very high temperatures.



Waterproof and Absorbent



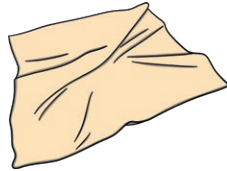
Waterproof materials do not let water pass through.



Absorbent materials take in (soak up) water.

Fabric

Fabrics can be human-made ('synthetic') or natural. Natural fabrics include wool, cotton, hessian and silk.



Different **fabrics** have different properties and so are used in different ways.

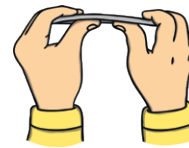


Squash, Twist, Stretch

Sometimes, types of the same **material** might act differently. Some **fabrics** will **stretch** and some will not.



Thin **materials** (such as tinfoil) might act in ways that thicker ones (such as a metal bar) might not.



Same Object, Different Materials

We choose the **material** that an object is made out of based on its properties.



ceramic mugs keep in some heat



plastic cups are **lighter** and cheaper but not good for the environment