

## Use of Everyday Materials

**Materials** can be used to make lots of different objects depending on their **properties**. For example, a water bottle needs to be **waterproof** and not **absorbent**.



The shapes of solid objects can be changed by **squashing**, **bending**, **twisting** and **stretching** them, depending on the materials they are made from. For example, an empty water bottle can be squashed and an elastic band can be stretched (but will then return to its original shape).

### Key vocabulary

Materials, Properties, Rigid, Flexible, Hard, Soft, Stretchy, Shiny, Dull, Rough, Smooth, Waterproof, Absorbent, Opaque, Transparent, Translucent, Flammable, Inflammable, Material, Brick, Glass, Paper, Fabric, Foil, Metal, Plastic, Wood, Squashing, Bending, Twisting, Stretching

	wood		stone
	metal		brick
	wool		cotton
	plastic		diamond
	leather		glass
	ceramic		ice
	fabric		

Which of these materials are hard  
and which are soft?

# Properties of Materials

## hard

not easily  
broken or  
pierced



A hard diamond.

## squashy

easily crushed  
or squeezed



The play dough is squashy.

## smooth

an even and  
regular surface



Some smooth pebbles.

## absorbent

able to soak  
up liquid



The sponge is absorbent.

## bumpy

uneven, raised  
patches



This shell is bumpy.

## opaque

cannot be  
seen through



She is hidden by the opaque screen.

## dull

lacking shine  
or brightness



The moth's wings are dull.

## brittle

hard, but may  
break easily



The glass is brittle.

## translucent

allowing some  
light to pass  
through



The screen is translucent.

## rigid

unable to be  
bent or forced  
out of shape



Stone is rigid.

## transparent

can be seen  
through



This glass is transparent.

## soft

not firm to  
the touch



The kitten has soft fur.

## flexible

able to bend



A flexible spring.

## rough

uneven,  
irregular surface



The log has rough bark.

## waterproof

repels water  
and liquids



A waterproof coat.

## elastic

springs back  
once stretched



An elastic band.

## shiny

reflects light,  
smooth surface



A shiny silver spoon.

## conductor

lets heat, electricity  
or sound to pass  
through it



Some metals are conductors of electricity.