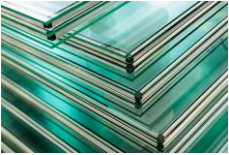


By the end of the unit, pupils will be able to answer...

- What can different materials be used for?
- How can you change the shape of some different materials?
- Which material is best for... and how do you know?

Vocabulary	Definition
flexible	easily bends without breaking
non-reflective	light does not bounce off easily
opaque	does not let light pass through
properties	a quality that something is known by
reflective	light bounces off easily
rigid	difficult or impossible to bend – it would break
shape	the appearance of an object as defined by its outer surface or outline
suitable	right for the situation or purpose
translucent	lets some light pass through – objects on the other side can be seen but are not clear
transparent	lets light pass through – objects on the other side can be seen clearly

Material	Image	Properties	Uses
metal		• strong, shiny, hard and long-lasting • can be hammered into different shapes	• pots and pans • stretched into wires and rods
glass		• strong, but thin glass shatters • transparent and waterproof • can be made into different shapes	• windows and windscreens • glasses • mirrors • table tops
wood		• hard and strong • long lasting • natural • flammable	• furniture like benches and desks • houses and cabins
plastic		• tough or flexible • can be made into any shape • can be dyed into different colours or made transparent	• packaging • bottles • toys • plates, knives and forks
rubber		• extremely tough or flexible • elastic • waterproof • doesn't tear/break easily	• balloons • protective gloves • tyres • glues
brick		• very hard and strong • difficult to break • thick and store heat well	• buildings • paving
paper		• thin and can be made into lots of different shapes • can be torn • goes soggy when wet	• writing • books • posters
cardboard		• often thin but is firmer and tougher than paper • difficult to tear • goes soggy when wet	• boxes for packaging • protecting things such as floors when painting

Investigate!	
• Classify materials • Make suggestions about alternative materials for a purpose that are both suitable and unsuitable • Carefully test the ways that the shape of objects can be changed	• Test the properties of materials for particular uses (eg compare the stretchiness of fabrics to select the most appropriate for Elastigirl's costume, test materials for waterproofness to select the most appropriate for a rain hat)