



What I should already know:

A range of basic materials and their properties.

The names of some materials and be able to identify wood, plastic, metal, glass, rock, brick and water.

Materials can be made into many different objects.

The same material can be made in to different objects.

The simple physical properties of materials and how these properties make materials useful for a particular purpose.

By the end of this unit I will know:

There are many different ways to change the shapes of objects made from different materials.

Some materials can be changed by the actions of squashing, bending, twisting and stretching

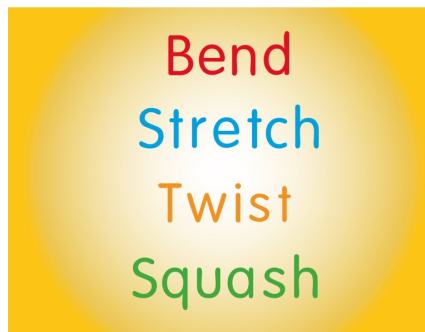


Investigation:

How can I change the shape of an object?

What property allows a material to be changed?

Year 2: Materials: Shaping Up
Science: Chemistry



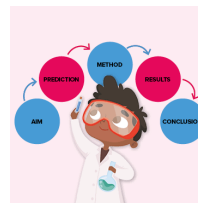
Working Scientifically

Observing closely, using simple equipment.

Performing simple tests and recording data.

Using observations and ideas to suggest answers to questions.

Gathering and recording data to help in answering questions.



TESTING FOR PROPERTIES

Flexible or rigid? Try to **bend** or **twist** it

Squashy or stiff? Try to **squash** it

Stretchy or stiff? Try to **stretch** it

Elastic? **squash** springs back **squash**

stretch springs back **stretch**

Vocabulary

Absorbent	Being able to soak up liquid easily.
Bendy	An object that bends easily in to a curved shape.
Dull	A colour or light that is not bright.
Fabric	Cloth or other material produced by weaving together cotton, wool or other threads.
Flexible	Can bend easily without breaking.
Hard	Materials that don't change shape when touched.
Man-made	Materials created by people.
Materials	Any substance that has a name: wood, plastic, metal, glass, water, rock, rubber.
Natural	Materials that exist in nature and are not made by people.
Opaque	Not being able to be seen through.
Rigid	Something that is strong and will not bend.
Shiny	Things that are bright and reflect the light.
Smooth	Materials that have no roughness, lumps or holes.
Soft	Materials that are not rough or hard.
Stretchy	Materials that are slightly elastic.
Translucent	Materials that allow light through but cant clearly see through.
Transparent	Materials that allow light through and objects can be clearly seen.
Waterproof	Materials that do not let water pass through.

Testing

parts that need to be made from different materials.

	Suitable materials
A wind model	
A garden bench	
A garden gnome	
A cookie cutter	
Bike helmet	

Now use your table of properties to write sentences about the materials you chose for 3 of the uses.
I think _____ is suitable for _____ because it is _____ and _____.