

# Materials

## What you've learnt already

- Understand different materials from Y1 and be able to say what things are made from.
- Have a basic understanding of objects that can bend, squash or twist.

## Choices

- When taking part within experiments —choosing the best material for the job.

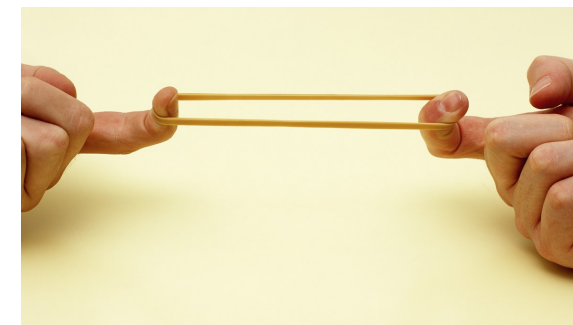
## Key Vocabulary

| Material | What an object is made from.   |
|----------|--|
| Pull     | to move toward   |
| Push     | to move away   |
| Elastic  | able to stretch, bend or twist without breaking and then return to                           |
| Squash   | can be crushed or squeezed, keeping the same volume, so that it becomes flat or out of shape |
| Stiff    | cannot be stretched or squashed  |
| Flexible | An object that can be bent.  |
| Twist    | to move something out of shape with a turning motion   |
| Rigid    | unable to bend   |



## Diagrams

Bend  
Stretch  
Twist  
Squash



## Lesson Sequence

|    |  |
|----|--|
| L1 | WALT- How can I change the                                   |
| L2 | WALT— <i>What properties allow a material to be changed?</i> |
| L3 | WALT— <i>Which material is fit for purpose?</i>              |
| L4 | WALT— : <i>What can pushes and</i>                           |

## Key Knowledge

Understanding that materials are selected based on their properties and that different properties make them better suited to different roles—e.g. something hard and rigid would be good to build with because it won't fall over or break.

Understanding that some materials can change their shape and that some can't, and linking this idea with why we use them for different purpose.

Understand how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.



## Materials Retrieval Grid

|   |                                      |   |   |
|---|--------------------------------------|---|---|
| What does breakable mean?                                 | Give 3 properties of glass.          | What does transparent mean?                     | What is the best material to keep a drink in? |
| Name 3 materials that would be best used to make a spoon. | Name 2 objects that are soft.        | Give 2 reasons why a window is made from glass. | What is the opposite of transparent?          |
| Give 3 properties of metal..                              | Why is metal not used to make a hat? | Which material is a bench made from?            | Name the 6 main materials.                    |
| Why are clothes made from fabric?                         | Name a waterproof material.          | Name 3 materials that can change shape.         | Which material is a house made from?          |

One Point

Two Points

Three Points

Four Points