

In this unit: Pupils will build on the knowledge and skills, which they acquired in Year 2. They will further investigate squashing, bending, twisting and stretching to create a youtube video demonstrating how to create a Roman style brooch using the correct scientific language.

Children should know:

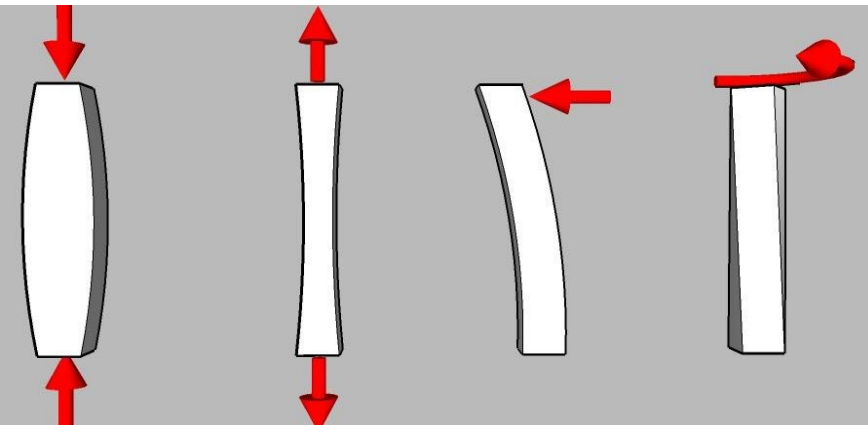
- that different materials have different properties.
- that different materials are suitable or unsuitable for different purposes.
- that different materials can be used for the same thing.
- the names and uses of everyday materials.
- that everyday materials can be used in creative and unusual ways.
- that some objects are solid and be able to identify which objects are.
- that some solid objects can be changed by twisting, bending, squashing and stretching.

By the end of this unit, children will know:

- the materials that are used in jewellery and why they are used.
- how Romans choose the materials based on their properties.
- how some materials can be manipulated to fit a purpose.
- how some materials can be changed for a purpose.

Pupils will investigate:

- a simple enquiry into manipulating materials.



Key Vocabulary

bending	change a straight object so that it is curved
brick	a small, man-made rectangular block made from clay used in building
cardboard	a thick, stiff form of paper
durability	the ability to withstand pressure or damage
elasticity	the ability of a material to go back to its original shape after being stretched or squashed
fireproof	does not easily set fire or burn
malleable	able to be hammered or pressed into shape without breaking or cracking
manipulated	able to be handled or controlled
manufactured	when a natural material is made into a new one
paper	a material manufactured into thin sheets from wood – used for writing, drawing or printing on
rigid	a material is unable to be forced out of shape or bent
squashing	crush something so that it becomes flat, soft or out of shape
stretching	made longer or wider without tearing or breaking
suitable	right or appropriate for a particular purpose, person or job
surface area	the amount of space the flat side of a shape takes up
texture	how something feels when it is touched
twisting	change the shape of an object by turning it
unsuitable	not right or appropriate for a particular purpose, person or job

Key Questions:

- which materials were Roman brooches made out of?
- which properties do different parts of my brooch need? Why?
- which material would be the best to choose for different parts of my brooch? why?
- which actions did the Romans use to knead and produce jewellery?