Science- Materials – Year 2 Autumn Term

Prior Learning:

In Year 1 you were taught to:

- Distinguish between an object and the materials from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.

Key Vocabulary

Hard	Not easily broken
Soft	Easy to mould or cut
Rigid	Synonym for hard
Bend	To shape into a curve
Squash	Cut or squeeze something out of a shape
Opaque	Not see-through
Transparent	See-through
Absorbent	Can soak up water
Waterproof	Does not let water through

Scientist Engineer

Isambard Kingdom Brunel build the Clifton Suspension bridge and lots of ships too

Where do materials come from?

Wood is a natural material and comes from trees.

Fabric comes from plants and animals.

Plastic is man-made, mainly from oil.

Metals are made from rocks that are heated up.

Glass is made from sand and heated up until it melts.

Properties of materials

Wood – strong, rigid

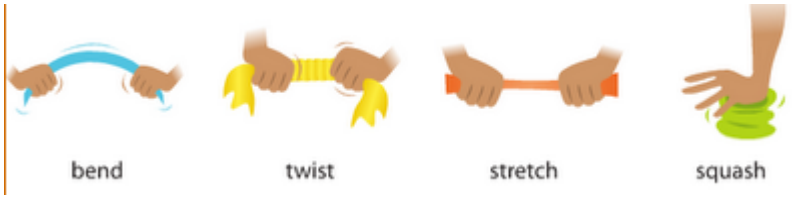
Fabric – light, warm, soft

Plastic – flexible, hard, rough, smooth, waterproof

Metal – Strong, hard, smooth, heavy

Glass – smooth, transparent

Some materials can change as you can:



Materials are chosen for different objects because of their properties. For example, a house is made from bricks. This is because bricks are strong and rigid.

Key Learning

- Every object is made from a material.
- Each material has properties that determine what it is like, e.g. hard, smooth.
- The properties of a material mean that some materials are suited to certain objects. For example, a chair must be made from something hard and strong.
- Materials can change through squashing, bending, twisting and stretching.
- Materials can be waterproof or absorbent.

Can I answer:

What materials can you see?
What are the properties of the materials?
What materials would you use for a slide? Give me reasoning why, using scientific vocabulary.
Can we change this materials by bending, squashing, twisting or stretching?