Science – Year 2
Summer 1
Materials

(Previous knowledge – sorting and classifying)

How can the shapes of solid objects be changed by squashing, bending, twisting and stretching?

Key Knowledge

Some **materials** can change shape when you squash, bend, twist or stretch them. **Materials** that are soft, bendy or stretchy are often easier to change the shape of than **materials** that are hard, **rigid** or **strong**.

Vocabulary

Tier 1	Tier 2	Tier 3
material	properties	absorbent
hard	waterproof	opaque
soft	sort	transparent
stretchy	man made	suitable
smooth	naturtal	classify

don't know — I know this word — I can use it in a sentence

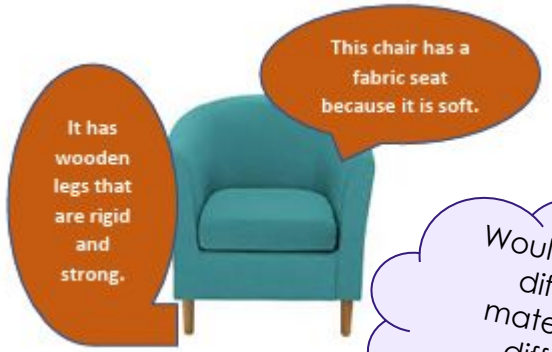
Uses of Everyday Materials

Some materials are used for more than one thing. For example, metal is used to make all of these things.

Different materials can be used to make the same thing. For example, spoons can be made of different materials.

The properties of a **material** affect their **suitability**, making them either suitable or unsuitable for particular uses.

Squashing		Crush something so that it becomes flat, soft, or out of shape.
Bending		Change a straight object so that it is curved.
Twisting		Change the shape of an object by turning it.
Stretching		Make something longer or wider without tearing or breaking it.



Would you use different materials for different vehicles? Why?

Significant scientists

John Loudon McAdam *(1756-1836)* 	John Loudon McAdam was a Scottish engineer who modernised the way we build roads. He was the inventor of tarmacadam road surfacing – commonly called tarmac.
Julie Brusaw 	Julie is one of the inventors of Solar Roadways. Solar roadways use solar powered road panels to form a smart roadway.

What have I already learnt?

I know that materials have different properties including being absorbent and opaque. Materials can be classified y their uses as well as their properties.

Useful Resources

https://www.bbc.co.uk/bitesize/topics/zg4skhv