Year 2, Autumn 1, Science

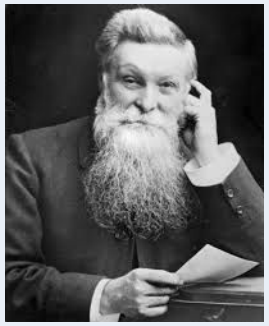
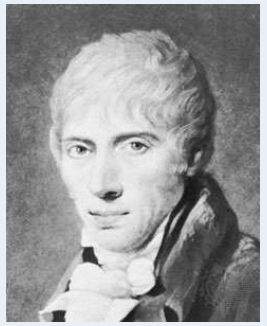
Materials

What do I already know?

Year 1 Topic on Materials

- ❑ I can explore materials
- ❑ I can name and recognise everyday materials
- ❑ I can say which materials are waterproof and can floatI can choose the best material to use in different situation
- ❑ I can know the purpose of materials
- ❑ I can describe the properties of materials
- ❑ I can know If a material can change its shape
- ❑ I can group materials by their physical properties

Significant Figures

John Dunlop	Charles Mackintosh	John McAdam
❑ Invented the air filled tyre in 1888	❑ Invented the waterproof raincoat	❑ Invented smooth, hard tarmac
		

Key facts: General Knowledge

What are materials used for?	❑ Materials are used for different purposes based on their properties ❑ E.g. wood is used to make furniture and floors ❑ Metal is used to make coins, cans, cars and cutlery ❑ Glass can be used to make windows
What properties of materials make them suitable for a particular use?	❑ Glass can be used to make windows because it is transparent ❑ Rulers can be made from wood, plastic or rubber because these materials are smooth and can be cut straight ❑ Spoons can be made from metal because it is waterproof and can be cleaned easily ❑ Spoons can also be made from plastic for children because it is light and it won't hurt children's growing teeth
How can you change the shape of materials?	❑ The shape of materials can be changed by using force. ❑ They can change shape when they are stretched, twisted, bent and squashed.

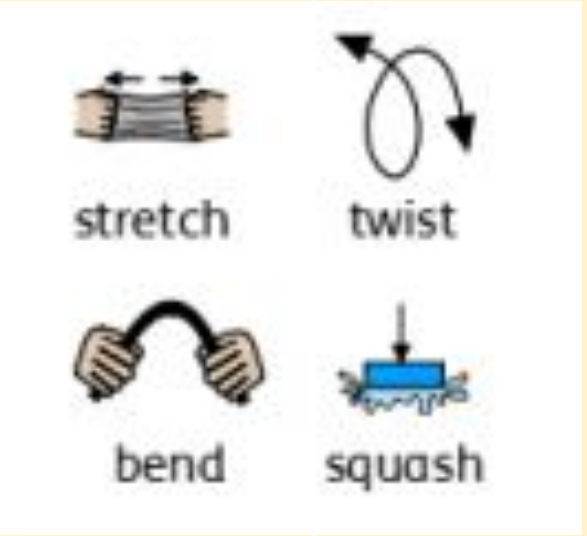
Key Vocabulary

absorb	to take in or soak up
brittle	easily breakable
durable	strong and long lasting
flammable	easily set on fire
flexible	can bend without breaking
man-made	created by humans
material	what something is made from
natural	came from nature, not made by humans
opaque	you cannot see through the material
properties	a characteristics of something / how you might describe it
rigid	Unable to bend or change shape / stiff
rough	an uneven surface / bumpy and uneven
smooth	an even level surface / flat surface
translucent	allows some light to pass through
transparent	Allows light to pass through / can see through the material
waterproof	can keep out water / can keep things dry

Diagrams/Symbols

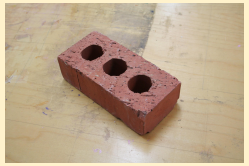
Properties of materials

Manipulating materials



Types of materials

brick



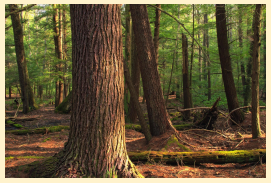
metal

rubber

stone

glass

plastic

sponge

wood