Knowledge Organiser

Year 2 Materials

Properties of materials.

WOOD Hard, stiff, strong, opaque, can be carved or formed into any shape.	PAPER Lightweight, flexible, can be coloured and come in different forms.
BRICK Strong, stiff, opaque, structural, can be solid or hollow. Vary in size and colour.	CARDBOARD Durable, strong, light, stiff. Can be moulded and bent easily.
PLASTIC Waterproof, strong, can be made to be flexible or stiff, smooth or rough.	FABRIC Soft, flexible, hard-wearing, can be stretchy, warm and absorbent.
METAL Strong, hard, easy to wash, can be melted and moulded, generally shiny.	RUBBER Hard-wearing, elastic, flexible, strong, bouncy, strong.
GLASS Waterproof, transparent, hard, smooth, fragile, can be heated to change shape.	STONE Strong, used for building, comes in different forms.

Changing materials

SQUASH	Crush or squeeze with a force so that it becomes flat or a different shape.
BEND	Shape or force something into a curve or angle.
TWIST	Rotate, twisting around a stationary point making a spiral shape.
STRETCH	By pulling to make something longer.
PUSH	Place a force in order to move something away.
PULL	Place a force to cause a movement towards something.
SQUEEZE	Firmly press or force something through a narrow space.















Plymouth Science

Year 2 Materials

VOCABULARY

Materials- what objects are made from.

Suitability- having the right properties for purpose.

Properties- What a material is like and how it behaves.

Waterproof- keeps water out.

Shock absorbentabsorbing energy to sudden shocks/impact.

Reflective- to reflect light.

Famous Scientists (Science Capital)

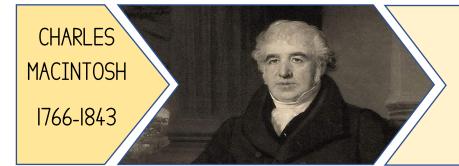
JOHN MCADAM 1756-1836

Scotlish engineer who experimented with using new materials to build roads, inventing a new process called 'macadamisation'. His effective and economical method of constructing roads is used across the world.

JOHN DUNLOP 1840-1921

Scottish engineer and veterinary surgeon.

Made rubber devices and invented the pneumatic tyre, developed the use of them in cycle racing.



Scottish chemist and inventor of waterproof fabric. His process involved painting a dissolved rubber solution into cloth. The Macintosh raincoat is named after him.









