



KEY KNOWLEDGE

- Materials are things we use to make objects and things around us.
- There are different types of materials, like wood, metal, plastic, and fabric.
- Materials have different properties, like being hard or soft, smooth or rough, heavy or light.
- Objects around us are made of everyday materials. For example, tables can be made of wood, and bottles can be made of plastic.
- Different materials have different uses. We use metal for making tools and plastic for containers.

DIAGRAM

	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.

KEY 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 absorbent- absorbing energy to sudden shocks/impact.

Reflective- to reflect light.

THINGS TO TALK ABOUT AT HOME

What things do you find at home that are waterproof?

How many things can you find that are made out of wood, metal and fabric and can you discuss their suitability.

Scientist

JOHN MCADAM 1756-1836 - Scottish 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.

CHARLES MACINTOSH 1766-1843 - Scottish chemist and inventor of waterproof fabric. His process involved painting a dissolved rubber solution into cloth. The Macintosh raincoat is named after him.