

## Key Vocabulary

WORD	DEFINITION
Absorbent	A material that is absorbent is one that soaks up liquid or moisture.
Flammable	Something that is flammable easily sets on fire.
Flexible	materials that can bend easily
Material	A substance that objects are made from.
Property	This is what a material is like and how it behaves ( shiny stretchy, waterproof rigid transparent ).
Rigid	unable to bend or be forced out of shape
Transparent	an object you can see through e.g. glass
Waterproof	Water cannot pass through an object or material that is waterproof.

## How can materials be changed?



## Key Knowledge and facts

- ❖ Metals are often strong, shiny, hard and long-lasting. Metals can be hammered into different shapes.
- ❖ Wood is hard, stiff and strong and can be carved into any shape. Wood is long-lasting and is a natural product. Wood is flammable.
- ❖ Glass can be strong, but thin glass shatters. Glass is transparent and waterproof. It can be made into different shapes.
- ❖ Plastic can be tough or flexible and can be made into any shape. Plastics can be coloured or transparent. Plastic is waterproof.
- ❖ Bricks are very hard and strong. They are difficult to break. Bricks are thick and store heat well.
- ❖ Paper is often thin and can be made into lots of different shapes (flexible). Paper can be torn. It goes soggy when wet.
- ❖ Cardboard is often thin but is firmer and tougher than paper. Cardboard is more difficult to tear. It goes soggy when wet.
- ❖ Rubber is extremely tough, but also very flexible. Rubber is elastic and also waterproof. Rubber doesn't tear easily.

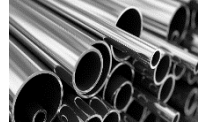
We use lots of different materials every day. Some materials are used to make many things.

**Wood**

is used to build furniture, like benches and desks and used to build houses and sheds.

**Metal**

can be shaped into anything, from a small paper clip to a huge aircraft.

**Plastic**

can be used to make toys, bottles and can be moulded into plates, knives and forks.

**Glass**

is used for windows, glasses and is also used in making mirrors

**Bricks**

are attached together with mortar and are used to make buildings. -They are also used for paving.

**Paper** is

used for writing - in diaries, notebooks and for printing on. Paper is used for posters/displays.



## Key people who invented new materials



**John Dunlop** was a Scottish inventor who invented the air-filled rubber tyre. It was originally to use with bicycles, and then became very useful when automobiles were developed



**Charles Macintosh** was a Scottish inventor and chemist who used rubber to make a waterproof fabric. He is best known for inventing the raincoat (Macintosh or Mac).



**John McAdam** was a Scottish engineer who experimented with new materials to build roads.