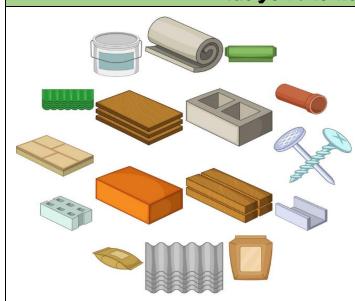


# EVERYDAY MATERIALS KNOWLEDGE ORGANISER



### What you should already know...



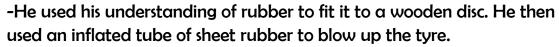
- -Materials are the substances that things are made from.
- -We use lots of different materials every day, e.g. metal, plastic, wood, and glass.
- -Different materials have certain properties, e.g. glass is see-through, metal is strong and often shiny, etc.
- -Composites are made from two or more materials together.
- Some materials are used to make many things.

## **Development of Materials**

#### **John Dunlop**





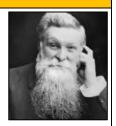


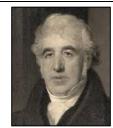
#### **Charles Macintosh**

- -Charles Macintosh is best known for inventing the raincoat.
- -He discovered a way in which rubber could be placed between two layers of cloth, to make it waterproof.
- -His name lives on today a raincoat is often called a Macintosh or Mac.

#### John McAdam

- -John McAdam was the first person to think of tarmac roads.
- -Roads used to be made from clay, earth, or chalk, but these materials were messy and not very smooth.
- -He spread hot tarmac on a road, adding lime chippings & flattening.







Properties of Materials			
Material	lmage	Properties	What could it be used for?
Metal		<ul> <li>-Metals are often strong, shiny, hard and long-lasting.</li> <li>-Metals can be hammered into different shapes.</li> </ul>	-Metals can be made into things like pots and pans. -Metals can stretched into wires and rods.
Glass		-Glass can be strong, but thin glass shattersGlass is transparent and waterproof. It can be made into different shapes.	-Glass is most often used to make windows and glassesIt is also used in making mirrors, table-tops and windscreens.
Wood		-Wood is hard and strong; -Wood is long-lasting and is a natural product. -Wood is flammable.	-Wood is often used to build furniture, like benches and desks. -Wood can be used to build houses and cabins.
Plastic		-Plastics can be tough or flexible and can be made into any shape. Plastics can be dyed different colours and can be made transparent.	<ul> <li>-Plastics can be used to make packaging, bottles and toys.</li> <li>-Plastics can be moulded into plates, knives and forks.</li> </ul>
Rubber		-Rubber is extremely tough, but also very flexible. -Rubber is elastic and also waterproof. Rubber doesn't tear easily.	-Not including food and drinks, water is still used in many, many products. For example, it is used in making paints, toothpastes, shampoos and cement.
Brick		-Bricks are very hard and strong. They are difficult to break. Bricks are thick and store heat well.	-Bricks are normally attached together with mortar and are used to make buildingsThey are also used for paving.
Paper		-Paper is often thin and can be made into lots of different shapes. Paper can be torn. It goes soggy when wet.	-Paper is normally used for writing. Paper is used in diaries, notebooks and for printing on. Paper is used for posters/displays.
Cardboard		-Cardboard is often thin but is firmer and tougher than paper. Cardboard is more difficult to tear. It goes soggy when wet.	-Cardboard is often turned into boxes and is then used for packaging items. It can be used for protection, e.g. protecting floors when painting.

#### **Properties of Materials Vocabulary**

Smooth Absorbent Dull Flexible Hard Squashy Bumpy Bouncy Flammable Translucent Waterproof Firm Soft