

Key Vocabulary

made material a material produced in a factory by people, usually made by mixing natural materials together.

eg: plastic, glass, brick, paper, fabric, nylon, metal

natural material a material that is found naturally in the world around us
eg: wood, some metals, water, rock, soil, wool, silk

properties things that describe a material. One material has lots of different properties, for example, glass is hard, smooth and transparent. We can find out a material's properties by using our senses

transparent see-through or clear eg: glass

opaque not see-through eg: a brick

translucent see something through

waterproof when a material will not let water pass through it eg: an umbrella

absorbent able to soak up liquid easily

Chemistry

Science Y1: Materials

Key knowledge

Everything around us and that we use is made of some form of **material**. All materials come from animals or plants, are dissolved in the sea or are mined from the ground.

Materials are **natural** or they are **made**.

Wood, **wool** and **clay** are **natural materials**. **Natural materials** are changed by people into lots of useful things.

People mix **natural materials** to make new ones. These are **made materials**. **Paper** is made from **wood** and other materials.

Glass is made from **sand** and certain types of **rock**.

Plastic is made from **oil** that is found in the ground.

Plastic can be moulded into lots of different shapes.

We use our **senses** to find out about materials. We use our eyes to see the colour of materials. We use our skin to touch and feel the surface of a material. We call things that describe a material its **properties**. Colour, roughness and smoothness can all be properties of a material. A material may be **rough** or **smooth**, **bumpy** or **uneven**. For example, a scourer is **rough**. It cleans off dirt; an umbrella has a **smooth** surface. It feels **flat** and **even**. Rain runs straight off it. Some materials **stretch**; a hat stretches to fit your head.

rock



wood



water



paper



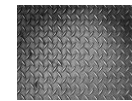
fabric



glass



metal



plastic



Scientists



Charles Macintosh, 1766 – 1843
Scottish chemist who invented **waterproof fabric**.

Links to prior learning:

Design & making (woodwork)
(Reception)

Next steps:

Properties of materials (Y2)

Links to other subjects:

Geography: materials used in homes around the world

Maths: data handling - sorting materials (venn diagram)

DT: designing our ideal bedroom