

Y2 Science – Materials Knowledge Builder

Everyday Materials:

Material – something that an object is made from.

Wood – a hard material that comes from the branches and trunks of trees.

Metal – a material that is generally hard and strong – electricity and heat can travel through it.

Plastic – a man-made material that can be shaped when soft into many different forms.

Glass – a hard, transparent material, used to make windows and bottles.

Rock – the dry solid part of the earth's surface.

Cardboard – a lot thicker than paper and much stronger.

Materials are the substances that objects are made from. We use a wide range of different materials daily, *e.g.* metal, plastic, wood, glass, ceramics and fabric.

Different materials have different properties, which make them suitable for different uses. We will be exploring the properties of materials. For example, is the material hard or soft, dully or shiny, smooth or rough, waterproof or absorbent?

We will investigate the suitability of a variety of everyday materials and by working scientifically will investigate which would be best to make a coat. We will also find out about Charles Mackintosh



Metal is **strong** and **smooth** which makes it a suitable material to make a fork.

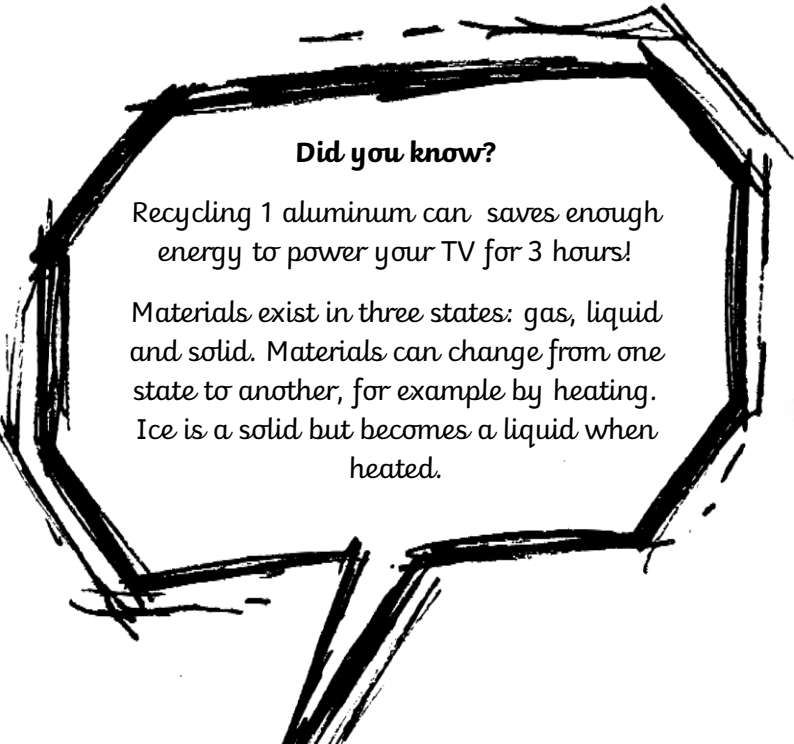


Plastic is **waterproof** and **transparent** which means it is a suitable material to make a water bottle.



Wood is **hard** which means it is a suitable material to make a chair.

Did you know?



Recycling 1 aluminum can saves enough energy to power your TV for 3 hours!

Materials exist in three states: gas, liquid and solid. Materials can change from one state to another, for example by heating. Ice is a solid but becomes a liquid when heated.

Properties of materials.

Hard – solid and firm to touch.

Soft – will move with touch and pressure.

Stretchy – capable of being stretched, it can change shape.

Stiff – difficult or impossible to bend or flex.

Shiny – bright or glossy in appearance.

Dull – not bright, shiny or clear.

Rough – has an uneven surface.

Smooth – has a flat, even surface.

Bendy – flexible, moves easily.

Waterproof – water does not go through it.

Absorbent – able to suck up a liquid.

Opaque – doesn't let light through.

Transparent – allows light to pass through.