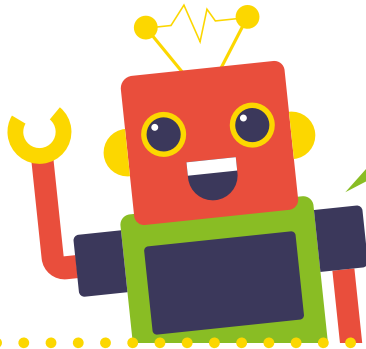


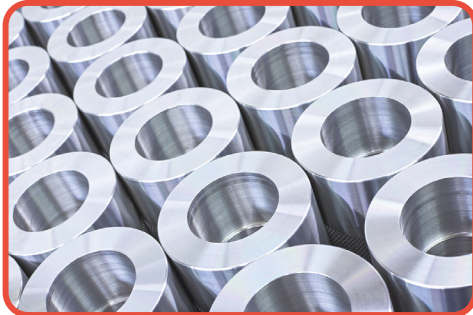
WHAT IS METAL?



THE **PROPERTY** OF A MATERIAL IS SOMETHING ABOUT IT THAT WE CAN SEE, FEEL OR MEASURE. FOR EXAMPLE, A MATERIAL MIGHT BE STRONG, WEAK, SMOOTH, ROUGH, MELT EASILY, NOT MELT EASILY...

METALS HAVE FIVE PROPERTIES

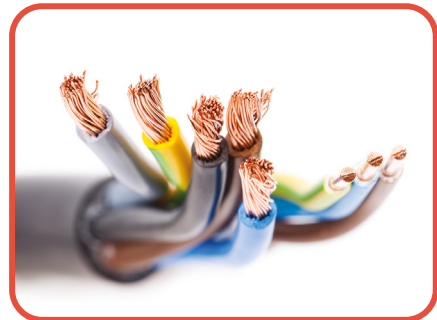
- 1** Most are shiny when clean.



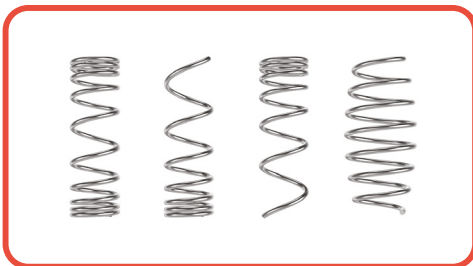
- 2** They are strong but malleable. Malleable means they can be bent and shaped.



- 3** They are good conductors. This means they allow heat and electricity to pass through them so are often used for making electric wires. Do you know which metal is usually used to make electric wire?



- 4** They are ductile. This means they can be pulled or stretched into a wire.



- 5** They are dense. This means they are generally heavy for their size.



TYPES OF METAL

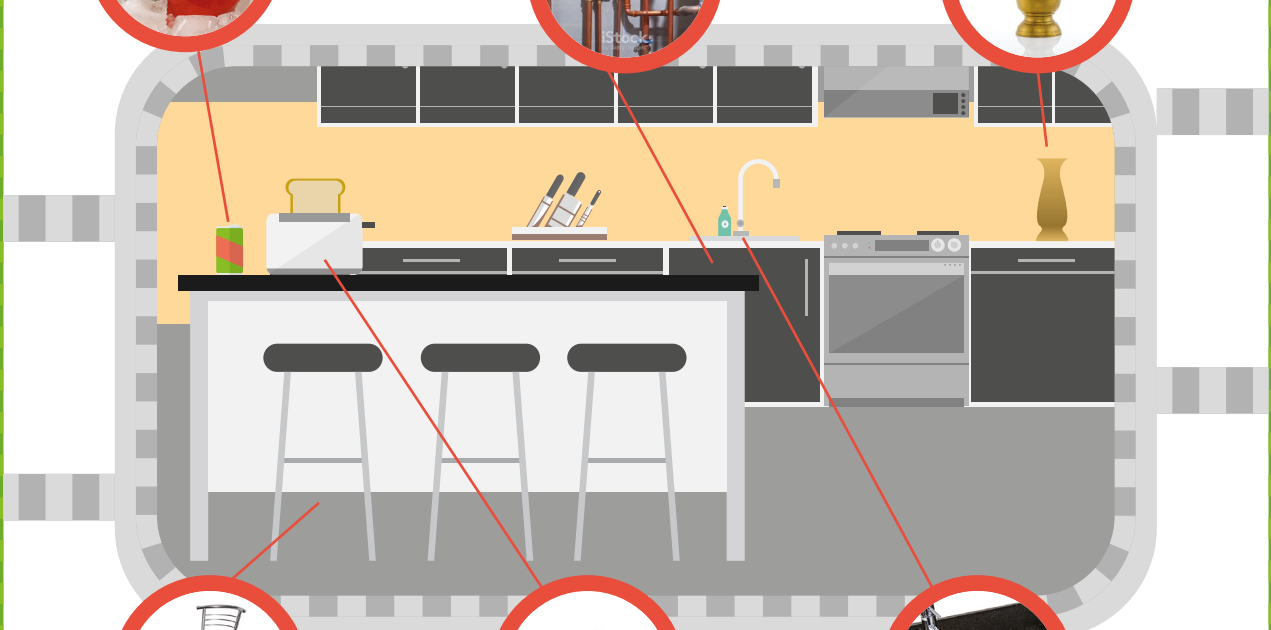
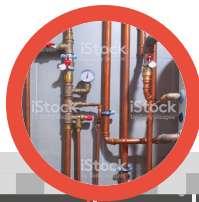
There are lots of metal items you probably have at home that can be recycled after they have been used. Metals can be recycled over and over again so who knows what your fork was in a past life! Part of a car engine?

HERE ARE SOME WELL KNOWN METALS AND THEIR QUALITIES...

1. ALUMINIUM is a light and bright metal which is often used to make drinks cans. It is also easy to shape and won't leave nasty bits in your pop because it doesn't react with air.

3. COPPER is a reddish, orange colour. It is good at conducting heat and electricity so can often be found in electric cables. It is also used in pipes because it doesn't react with water and can easily be cut, bent or shaped to get the water to your sink or shower.

5. BRASS is an alloy of zinc and copper and is often used for decorations because of its bright gold-like appearance. It is also used in musical instruments as it conducts sound well.



2. IRON can be used to make lots of items in building and construction, such as concrete. It rusts easily when it comes into contact with air and water, but is very malleable and strong!

4. NICKEL is a silver, white colour which is very easy to make into new shapes. It is very resistant to heat so is used in a lot of cooking utensils such as toasters and kettles.

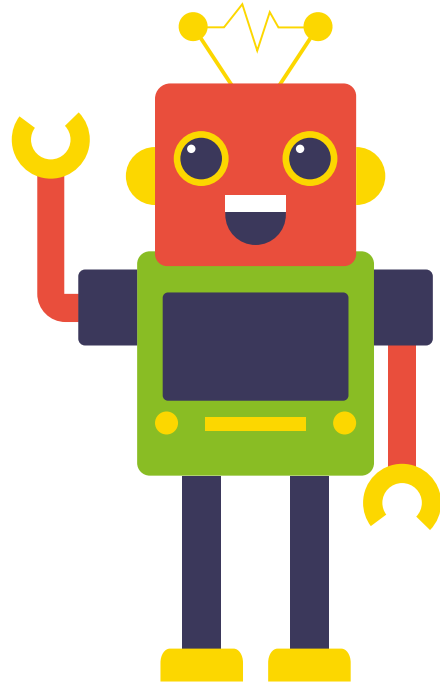
6. STAINLESS STEEL is an important alloy created from a mixture of metals, mostly iron. There are many different types of steel including stainless steel, galvanized steel and carbon steel. It is both cheap and strong so is used to make all kinds of products such as building structures, machines, railways and cars.



ACTIVITY

Lots of items are made from metal! How many metal items can you find in your home?

Can you guess what metals they are and why they have been used to make that product?



ITEM	HOW DO YOU KNOW IT IS METAL? (THINK OF THE PROPERTIES)
<i>Example: Radiator</i>	<i>Good conductor, Strong</i>