



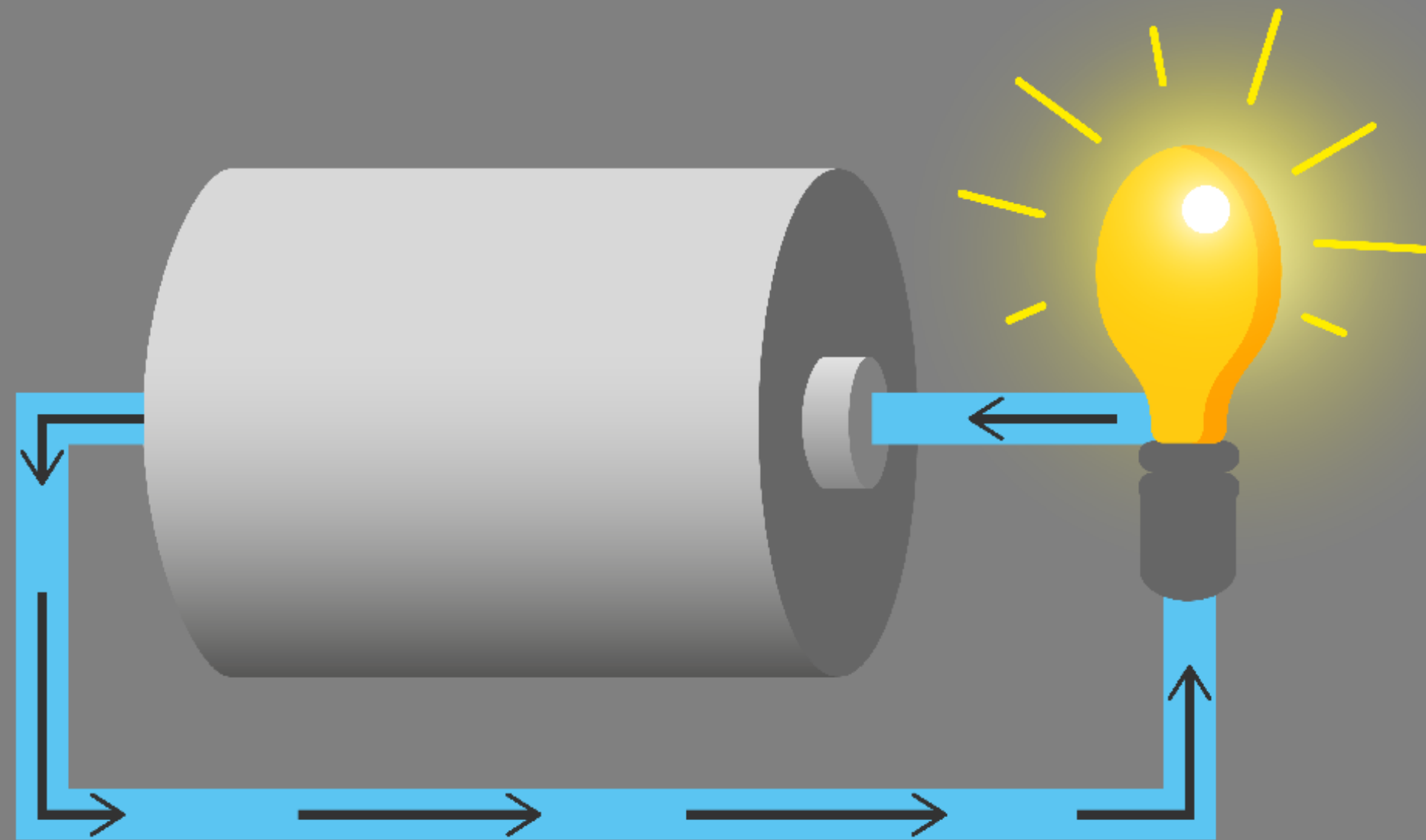
**BIG
BATTERY
HUNT**

What do these objects have in common?



That's right!
They are all powered
by batteries.





So how do batteries work? Is it magic?



When a battery is put into an appliance it creates a circuit. This causes the chemicals inside the battery to react together which produces electricity.

Over a billion batteries are made for the U.K. every year. But what are they made of?

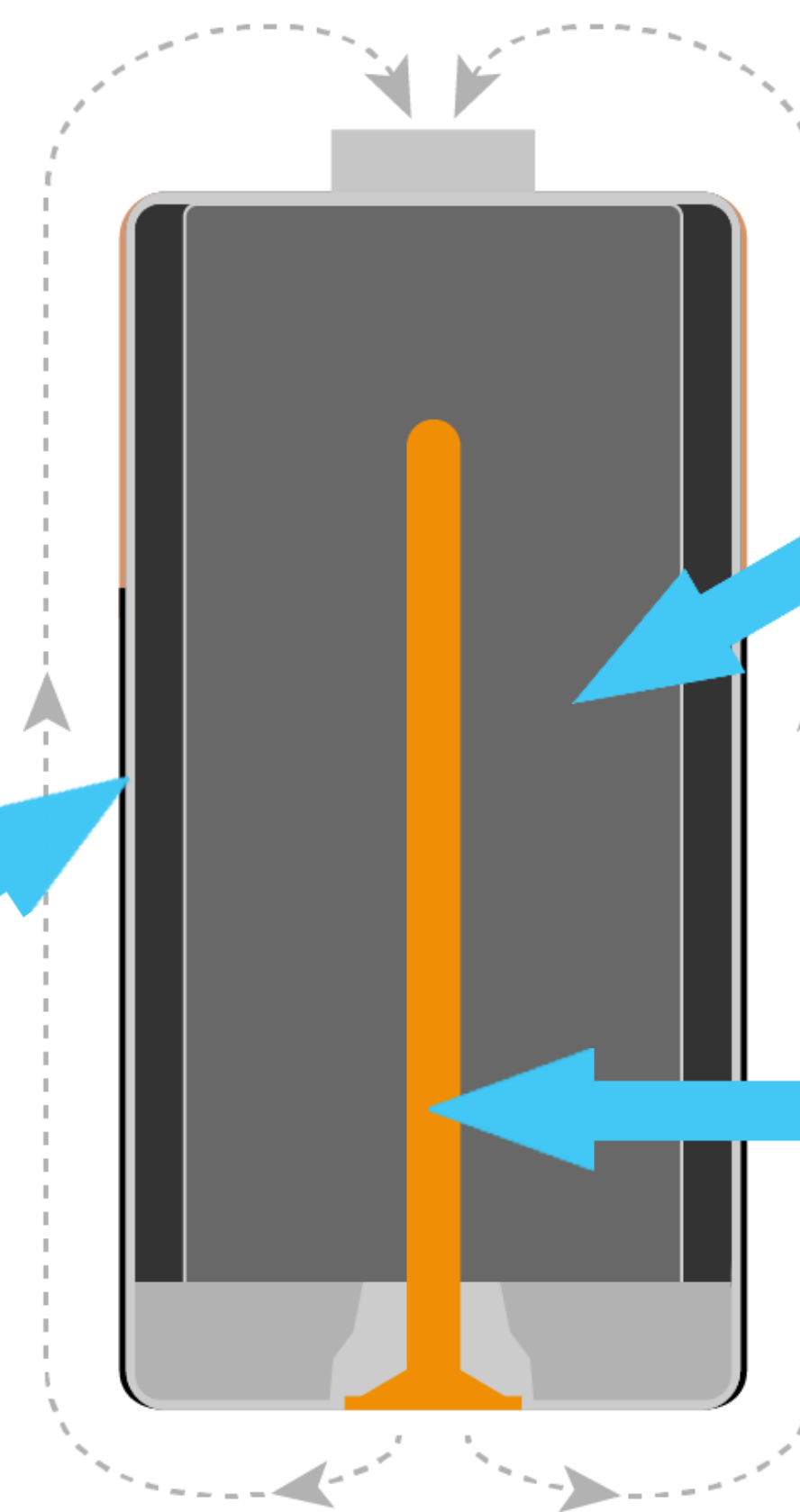
Here's an example of a common battery...



The outside of the battery is made from a mixture of metals called **nickel plated steel**.

Inside there are two chemicals – **zinc** and **manganese dioxide**.

There is a small **brass nail** inside the centre of the battery.





The zinc comes in big slabs and has to be melted down before secret performance enhancers are added.





Finally, a huge machine puts the nail and the chemicals into the casing and adds a dimple cap on the end.



But what happens when the battery runs out of power? Should we throw it away?



If you usually throw them in the rubbish bin...think again!





Most of the rubbish we throw away in the bin ends up in landfill sites like this. Landfill sites like this are horrible! They take up space, are smelly and can be bad for the environment and our health! Yuck!



Did you know, each year we throw away about **600 million batteries?**

More than **20,000 tonnes** of batteries end up in landfill sites – that's as heavy as **4,000 elephants!**

Laid end-to-end these batteries would reach from the **UK to Australia and back again.**



20,000
TONNES OF BATTERIES



4,000
ELEPHANTS



It can take 100 years for a battery to decompose (break down and disappear)



The chemicals in the battery can pollute the soil and water, which animals and plants need to survive.



STOP!
There's another
choice.

Instead of throwing your
batteries away, why not
do something amazing?




You can recycle them!



All of the parts of the battery can be separated and used again to make new things.

400 million batteries are currently recycled each year. But that just a small fraction of the batteries that are sold in shops.


Did you know the different materials from batteries can be recycled and reused in different ways?



Recycled steel can be used by the construction industry. So your old battery could end up in a sky scraper!



Recycled metals and plastics can be used to make new batteries.



The chemicals can even be processed and used in grass fertilizer!



Battery Pioneers we need you!

We need you to be powering the change and telling your friends, family and local community why it's so important to recycle batteries and how to do it.

We need everyone to go on a Big Battery Hunt!





Be Part of The Big Battery Hunt

Previously, children just like you have collected over 11 million batteries for recycling as part of the Big Battery Hunt.





Be Part of The Big Battery Hunt

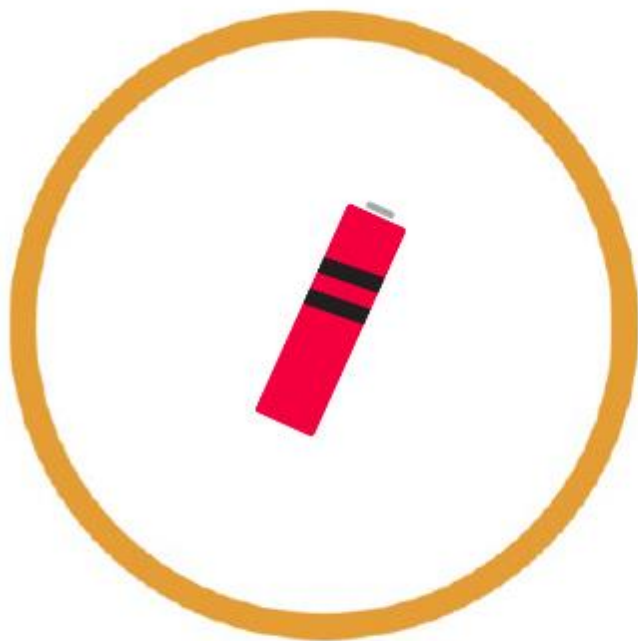
This year we want to encourage people to recycle their batteries just as regularly as they recycle plastic, paper and carrier bags.





Be Part of The Big Battery Hunt

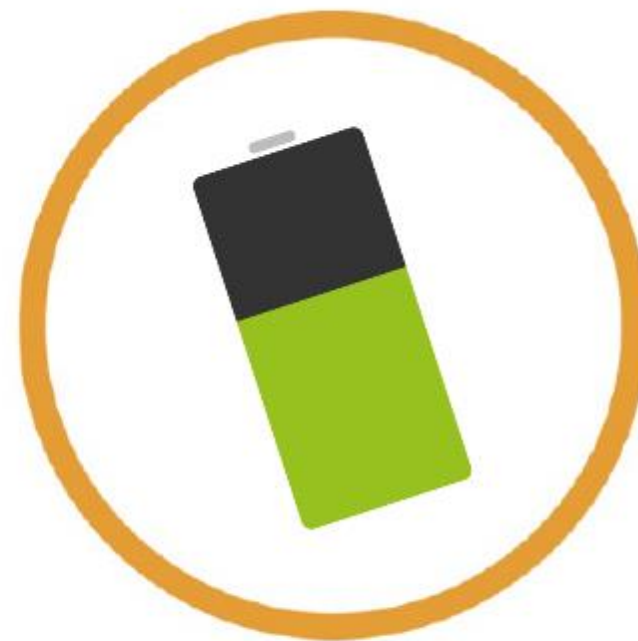
We are only collecting these batteries. They will have been used in things like remote controls, toys and torches.



AAA



AA



C



D



Safety First!

It's really important to stay safe when collecting your used batteries.



Bring your batteries for recycling into the Science Room. They will be counted and then will be recycled.