

## WHAT HAPPENS TO MOBILE PHONES WHEN WE NO LONGER NEED THEM?



## Know what we can do to dispose of batteries and other electronics.





## **The Landfill**



50 million tonnes of e-waste are thrown away each year.



That's the same as 333,333 blue whales!



Rubbish that ends up at the landfill can take thousands of years to decompose.



Landfills can contaminate the ground around them.







## Recycling



Rubbish we don't want is turned into things we need.

Very little of the material ends up at the landfill.





Recycling is a process with multiple steps:

Disassembly Processing Separation Find out more about how batteries are recycled with this fun activity: https://faraday.ac.uk/wpcontent/uploads/2020/04/Crunchie-Bar-Batteries-2.pdf

#### How can we reduce our waste?



### **Reduce – Reuse – Recycle**





#### Reduce:

How can we make less waste?



## Reuse:

What can be used again?



#### Recycle:

How can we turn it back into something useful?



Discuss: What can you do to Reduce, Reuse and Recycle?

#### How can we achieve a more sustainable world?

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Venkat is a scientist working with The Faraday Institution.

His focus is on ensuring the materials we use in our batteries are effective but also sustainable.

Using sustainable materials in our batteries means they are easier to source and recycle.

This reduces the amount of waste that ends up at landfills saving the planet.



Dr. Venkat Daramalla





# Throwing away our electronics

Read the text about throwing away electronics then answer the question on the next page.

Did you know that humans throw away 50 million

tonnes of e-waste every year? E-waste includes TVs,

laptops, toasters, so, almost anything that uses electricity to power it. 50 million tonnes is the same as 270,000 jumbo jets, or 333,333 blue whales, or 8,300,000 African elephants!

The rubbish that goes to the landfill can take hundreds or even thousands of years to decompose.