



# Household Recycling

twinkl

# How Does It All Begin?

We are told which materials we can recycle and which we can not.



We wash out any dirty containers and put the items into the right containers.

# What Happens Next?

Your domestic recycling is collected and taken to a Materials Recovery Facility (MRF).

If you have two separate containers for recycling, your collection vehicle will have two compartments so the recycling does not need to be sorted again.



# What Happens at the Materials Recovery Facility?

At the Materials Recovery Facility the recyclable materials are sorted into various categories:

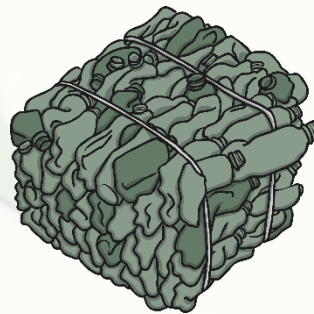
Paper and  
Cardboard



Metal



Plastic

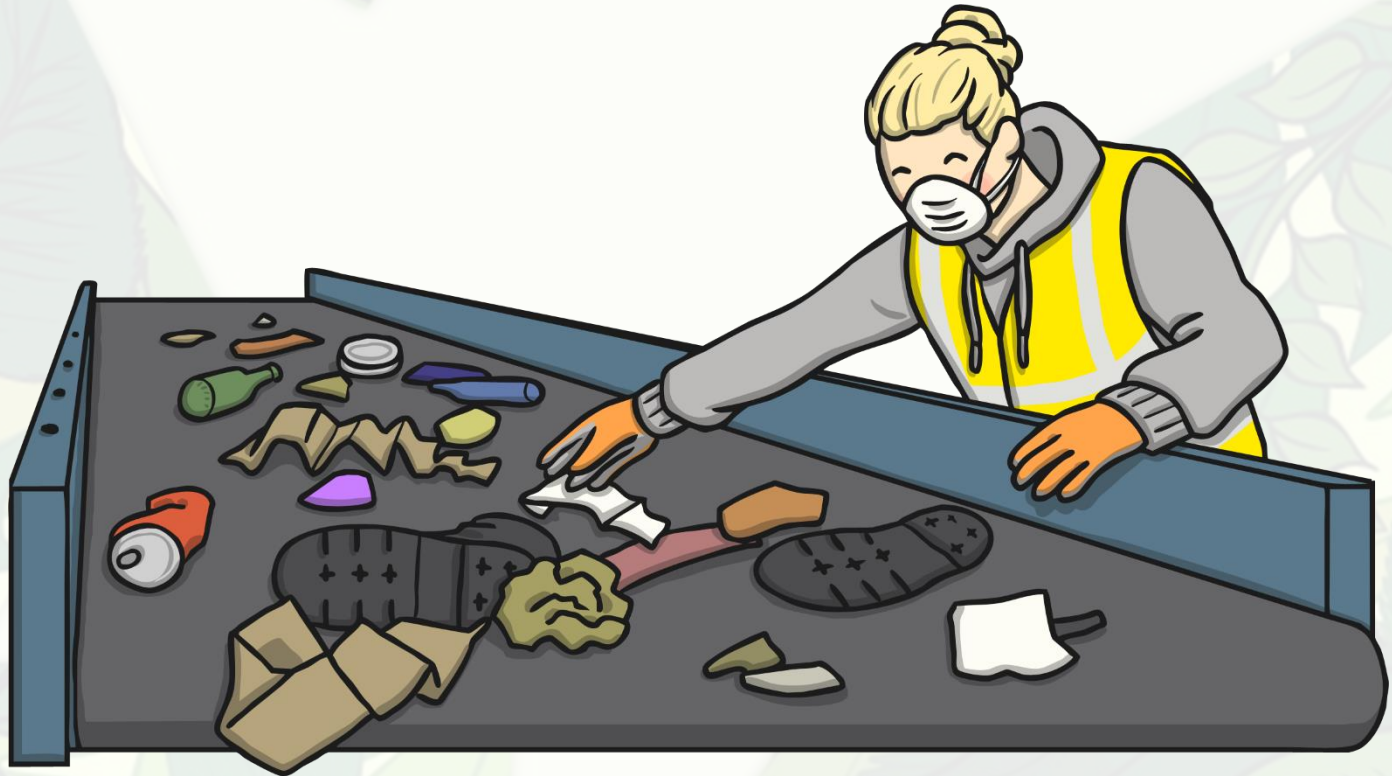


Glass



# How are the Materials Sorted?

The materials will be sorted by people, machines or a mix of both. In each case, the rubbish goes through the facility on a long conveyor belt.



# How are the Materials Sorted?

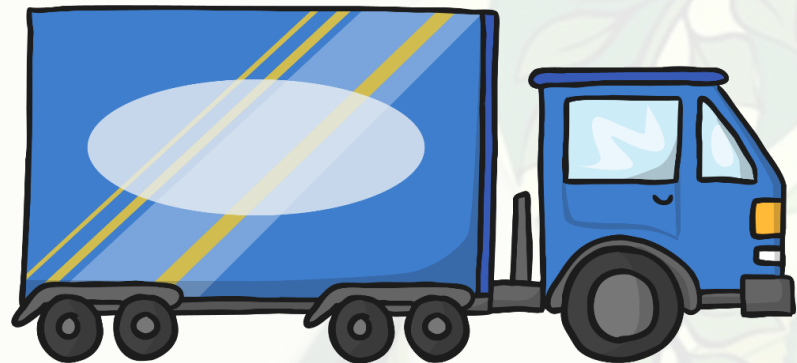
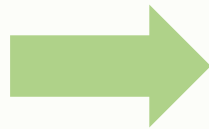
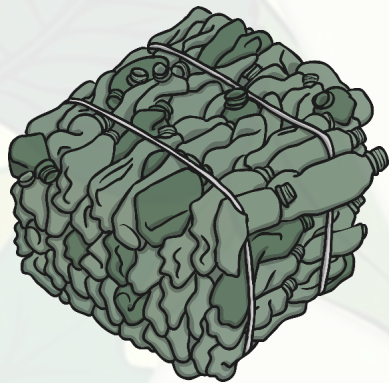
A recycling machine sorts the materials in different ways.

1. First, jets of air are used to separate out the card and paper.
2. The rubbish then passes over revolving toothed wheels which separate the lighter plastic from the heavier metal and glass.
3. Finally the rubbish stream is run under a magnet which picks out some of the objects made of metal.



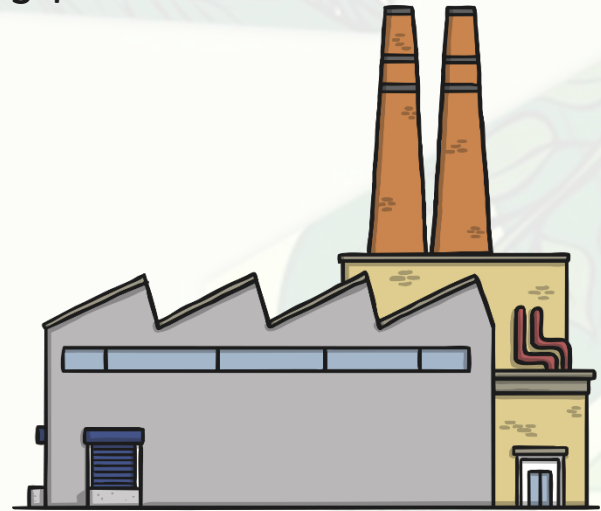
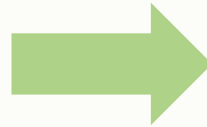
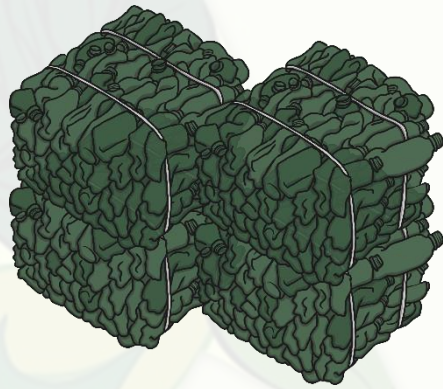
# Why are the Recycled Materials Made Into Bales?

Bales are really easy to stack and transport. The dimensions can be calculated so that they fit exactly into containers and onto lorries.



# What Happens to the Bales?

The bales of material are then sold to any company that wishes to use them in their manufacturing process.



Some companies use recycled materials because they are cheaper, others for environmental reasons.



# Why are Only Some Types of Plastic Recycled?

In actual fact almost all plastic CAN be recycled. What is actually recycled depends on a combination of several things...

1. Are there any buyers for a particular type of plastic?
  2. How easy is it to sort?
- (Buyers will pay more for plastic which is all of the same type.)

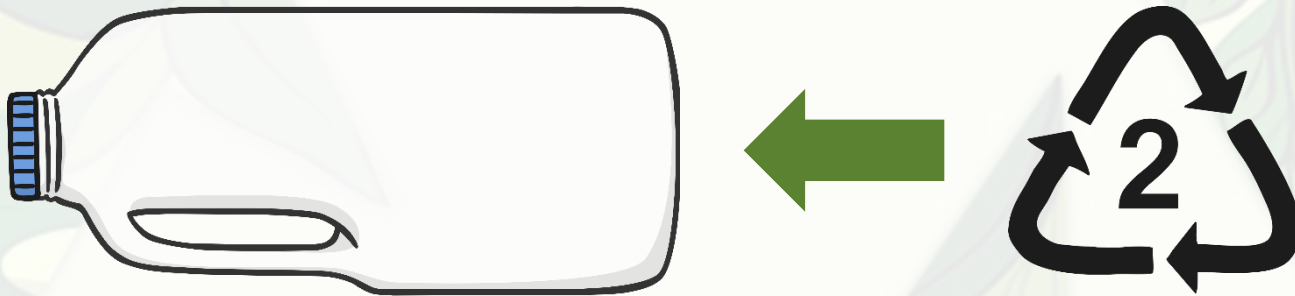
Often only plastic bottles are collected from our homes because MRF operatives can count on them being made from the same type of plastic and therefore they will produce 'pure' bales.

Other types of plastic are accepted at recycling sites such as those in supermarket car parks and these materials will be collected separately and taken to a different MRF.

# How Can You Tell Plastics Apart?


Plastic is classified according to its chemical structure. Different plastics have different properties and uses.

Lots of plastic objects use a Resin Identification Code. The number displayed in the chasing arrows symbol tells recyclers which type of plastic the object is made from. The symbol will normally be found on the plastic rather than on the label.



# What Different Types of Plastic Are There?



Symbol	Name	Abbreviation	Used for
 <b>OTHER</b>	<p>Any other plastic. Often a mix of more than one resin. E.g Polycarbonate</p>	OTHER	<p>Sports bottles, baby bottles, sippy cups, lenses, riot shields.</p> <p>packaging, take away</p>

# What is the difference between upcycling and downcycling?

Some recycled materials cannot retain the purity required to make a new product of the same quality so they are downcycled – used to make products of a lower quality.



Paper and plastic are examples of materials that are generally downcycled.

A material is considered to have been upcycled if it is made into an item of higher quality or value than the original object.



For example, this term would apply to plastic shopping bags being made into jewellery.

# How Are Paper and Card Recycled?

Paper and cardboard are sorted and graded at the Materials Recovery Facility and then sent to paper mills.

The paper and card is mixed with water to form a slurry and then washed to remove ink, glue and other impurities.

Then it is dried into huge sheets ready for resale.

A newspaper can be recycled into another newspaper in just 7 days!



# How is Glass Recycled?

Most glass is reused to make more glass bottles and jars but a small amount ends up being used as aggregate in building projects.

Lasers are used to help separate the different colours of glass and then the sorted glass is crushed into a substance called 'cullet'.

This is then mixed with other substances and heated until it is a liquid that can be poured and moulded to make new glass bottles and jars.



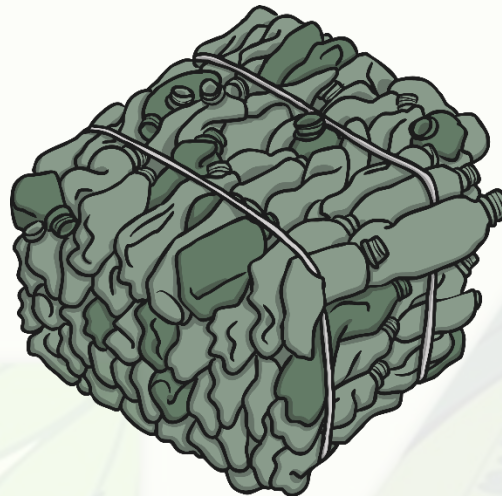
# How is Plastic Recycled?

First, plastic is sorted and baled and sent to a reprocessing plant.








Next, the plastic is cleaned and sorted again.

The plastic is then ground into flakes which are sorted and cleaned again.

The plastic is melted and cooled into beads which are ready to be reused.



# What are Plastics Recycled Into?

 <p>PETE</p>	Car bumpers, luggage, clothing, food and drink containers.
 <p>HDPE</p>	Playground equipment, bottles for laundry detergent, pipes, buckets and bins.
 <p>PVC</p>	Binders, notebooks, mud flaps on cars, traffic cones, buckets and bins.
 <p>LDPE</p>	Bin liners, can pack rings.
 <p>PP</p>	Ice scrapers, rakes, bike racks.
 <p>PS</p>	Light switch plates, cafeteria trays, plates and cups.
 <p>OTHER</p>	Plastic lumber.



