

# FROM OLD TO NEW...

Want to know what becomes of our empty baked-bean tins, rinsed-out jam jars, drained juice bottles and old birthday cards? Follow this diagram to find out!

Once different materials have been separated at a **Materials Recovery Facility** (see previous page), at **special sorting bins** or by you at home, they go to various **factories**. They're then put through processes that turn them into something new! Here are some of them...

Start here!

## Glass

1. First, the glass is **crushed**. Any non-glass bits are removed.
2. A **sorting machine** uses beams of light to separate out different colours of glass.
3. The glass bits are **melted in a furnace** at more than 1,400°C. Some new raw materials are added.
4. Hot **liquid glass** is poured into a **mould**. It cools down and makes **new jars**.
5. New jars are sent off to be filled with **food or drink**.

## Plastic

1. Some plastics can be recycled easily. First, plastic cartons and bottles are **shredded into small flakes**.
2. The flakes are **washed**.
3. They're then poured into a **flotation tank**.
4. The clean, pure flakes are **melted**. Sometimes, new plastic is added.
5. **Liquid plastic** is made into **new bottles** – some for drinks, others for detergents.

## Metal cans

1. Cans are **separated** into piles of **steel** and **aluminium**.
2. **Aluminium cans** are **shredded**...  
...then **cleaned** using **very hot air**...  
...before going into a **furnace**.
3. **Steel** is rolled into **coils**. **Aluminium** is hardened into massive blocks called **ingots**.
4. Cooled metals can be **cut up and shaped** into new cans.

## Paper

1. Old paper is **mixed with water** and turned into **pulp**.
2. The pulp is **thoroughly cleaned**.
3. The clean pulp is **squashed and rolled into sheets**.
4. Each time paper is recycled, it **loses quality**. So it's used to make lower and lower 'grades' of paper, from posh notepads to loo rolls.

IT MAKES WHAT?!!



Jam jar is magicked into... **INSULATION**

Some recycled glass is used to make **glass wool** which keeps buildings nice and warm, saving even more energy!



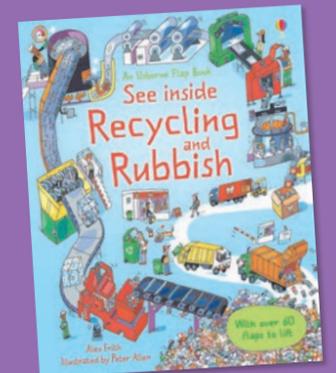
Milk carton becomes a... **SLEEPING BAG!**

There's every chance your plastic milk carton could have been a plastic milk carton already – 30 times or even more. But they're also turned into **bin bags**, **CD cases** and, unbelievably, the filling for **sleeping bags!**



Can of pop transforms into a... **FAMILY CAR!**

Yup, incredibly, after reprocessing, your tins and cans may become **cars** or even **ships!**



You can find out loads more cool stuff about our waste in **See inside Recycling and Rubbish** from Usborne!

Find out more at [usborne.com](http://usborne.com)