

## Sustainability in Packaging

*Sustainability in Packaging will help you think about how we can try to stop the packaging we use from damaging the Earth. Have a go at thinking about each question before checking our hints and answers.*

*This activity is suitable for primary school age students, and is designed to support topics including PSHE, design and technology and science. Some parental support may be required.*

Throughout history we have used lots of different materials to package the things we buy, and these materials have all affected the Earth differently. Today it is very important to think about whether our packaging can harm the planet, and what we can learn from packaging in the past and the ways brands are improving packaging now to be more sustainable. Sustainable packaging means packaging that still does its job without damaging our planet.

So what happens to packaging when we throw it in the bin? Well normally one of three things:

It biodegrades. This means it will break down and can go safely back into our soil within a year without causing much harm to the Earth. Materials like card or paper are biodegradable.



It is recycled or reused. This packaging can be cleaned, and either reused by us at home, or can go to places called recycling centres where it is turned into something new. Materials like card, glass, metal and some plastics can be recycled or reused.



Packaging that can't biodegrade, be reused or be recycled goes to places called landfill sites, where it is buried and left to break down over thousands of years. Materials like plastic often go to landfill sites.



## The Problems...

When packaging is buried in landfill sites, that land can't be used for farming or to build houses on for thousands of years. As the packaging slowly breaks down it releases dangerous chemicals into the soil, and dangerous gasses into the air, which can help add to global warming. This also happens when we burn packaging. Sadly a lot of packaging also often ends up in our oceans, sometimes forming giant islands of rubbish. In fact, so much plastic goes into the sea that it's estimated that one in three sea turtles today has eaten plastic!



These packets of crisps were buried in a garden in the 1970s, and dug up again in 2019. Look how well they have lasted after nearly 50 years underground! This gives us a good idea of just how long this plastic could take to break down in landfill.

It's clear we need to create less wasteful packaging, especially a lot of the plastic that ends up in landfill sites. But why do we use so much plastic at all? Have a go at thinking of some of the benefits of using plastic in packaging below:

Why do we use plastic?

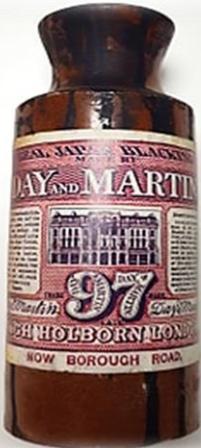
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*Hint: plastic keeps food hygienic as it is air and water tight. It is very cheap to make and buy. It is durable and hard to break and can stand different temperatures. It is flexible, and can be made into almost any shape!*

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However, although we see plastic everywhere today, we didn't always use plastic. In fact, the first man made type of plastic wasn't even invented until 1907. We had to find lots of other ways to package things for hundreds of years before this!

Take a look at some of these examples of sustainable packaging from the past from Museum:



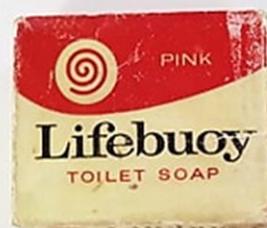
Day and Martin Real Japan Blacking Shoe Polish. This Victorian shoe polish came in a large ceramic (clay) pot, which was very strong and could be reused over and over. The big jar also meant that customers could get a lot more shoe polish with less packaging, meaning it was cheaper and used less packaging in the long term than most shoe polishes today! The label was paper, and completely biodegradable.

Golden Shred Marmalade. This ceramic (clay) Edwardian jar of marmalade, like the shoe polish above, was strong and easy to reuse at home. The top of the jar was covered with cloth which could also be reused, and the paper label was biodegradable.



Corona Orangeade. This glass bottle of fizzy orange juice from the 1920s-30s, was delivered to peoples' doors. When customers finished the drink, they could return the bottle to be cleaned and refilled and swap it for a full bottle. This refill system meant that new bottles did not need to be created, and old ones didn't need to be thrown away, stopping lots of waste.

Lifebuoy Toilet Soap. Toilet soap was not for toilets! It was soap, deodorant and shampoo in one product. This 1960s toilet soap came in a simple card box, with no plastic around the soap like we might see today. The packaging could be completely recyclable or biodegradable.



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These are great examples of sustainable packaging from the past, but lots of companies are also creating more environmentally friendly packaging today. Have a look at these examples, what do you think is good about each of them? Have a go at underlining or highlighting the good points.

## Ecover – S. C. Johnson and Son

This Ecover fabric softener bottle is made from recycled plastic and plant based plastic. Plant based plastic is a *renewable resource*, which means it can be replaced naturally over and over again. It can be recycled, but some shops also let customers bring the bottle back to have it refilled to use again.



## Dove, Sure and Vaseline – Unilever

Unilever have created compressed packaging – this means squeezing the same amount of deodorant in a normal spray into a much much smaller bottle. This means that less metal packaging is wasted, and less gas from inside the spray is wasted. The bottles can also be recycled when we finish with them.



## Reusable Coffee Cup – Starbucks

Starbucks have created reusable coffee cups to try and waste less paper. Using a reusable cup for one month saves one pound of paper! Customers also get a 10% discount if they use the cup, encouraging more people bring one along to save paper. In some areas, if the cup gets broken it can also be recycled.



## Edible Coffee Cup - KFC

KFC have invented an edible coffee cup. The cup is made from a clever design of layers of chocolate, biscuit and sugar paper so that it won't melt at all when it is full of hot coffee. Once the cup is empty, it can be eaten, or thrown away with left over food to biodegrade, meaning it creates no waste at all!



We have seen some different types of sustainable packaging from the past, and how some brands are trying to be more sustainable today. Now it's your turn to have a go – find a product, or several items from your cupboard with packaging you think could be more environmentally friendly. If you aren't sure where to start, why not think about the size, if there is any packaging or parts of the packaging that are not needed, or what the packaging is for (like grabbing the customer's attention, or keeping the product safe). Have a go at drawing your improved packaging in the space below.

My sustainable packaging:

Once you're finished, ask your parents or carers to Tweet us your design at @museumofbrands – we will be sharing our favourites!

## For Your Adult...

The Museum of Brands is a registered charity and independent museum, and relies on your support to care for our collection and to continue to provide learning opportunities for students and families across the country. If you have enjoyed this digital resource please consider visiting <https://www.museumofbrands.com/online-resources/> to make a voluntary donation to help us continue our work, and to take a look at our other free online resources.

We look forward to welcoming you to the Museum again soon!