

REUSE CUTS WASTE

The plastic bag problem

Plastic bags are a problem for the environment. Plastic is made from oil which is an increasingly scarce resource and when discarded plastic bags end up in landfill sites they can take centuries to break down.

In some countries, including Ireland, a tax has been introduced on carrier bags so that shoppers have to pay for them. This has been very effective in cutting the number of bags being thrown away. One way to avoid using so many carrier bags is to buy a 'bag for life'.

Available at supermarkets and other shops for as little as 10p each, these strong plastic bags can be reused again and again. When they eventually wear out, they can be taken back to the shop for recycling. Or you could avoid plastic bags altogether and use a cloth shopping bag.

Another solution is to reuse old plastic bags to carry your shopping. It is easy to make a handy holder for storing your plastic bags from old clothes.



Scrap Challenge

This is an ideal starter before the activity below or can be used independently. It takes approximately 20 minutes. Divide the class into teams and give each team a piece of scrap paper. One at a time, show the class the following items:-

margarine tub	cardboard box	CD
jam jar	newspaper	yoghurt pot

The teams should write down as many different ways to reuse each item as they can. They should then share their answers, getting one point for every practical way of reusing that they have thought of.

Making a carrier bag holder

You will need (for a class of 30)

- 15 pairs of old trousers / long sleeved tops / jumpers.
- Strong scissors for use by teacher and other scissors for children
- Needles – tapestry needles are fine and not sharp
- 30cm of elastic per child
- Sticky Velcro (optional)
- Cotton - a number of the smallest reels available
- Hole punch
- Glue and staplers for fixing decorations to bag holder
- Commercial examples of carrier bag holders (optional)

Step one – preparation

- Unstitch or cut the arms and legs off the clothes. Keep scraps of material, wool and buttons for decoration. Recycle the rest.
- Put together 5 sewing kits. For a class of 30, each should contain 2 small reels of cotton, 6 x 30cm strips of elastic, 6 x 1.5 cm strips of sticky Velcro and a pack of 6 tapestry needles.

Step two - introduction to design

Ask what makes a good carrier bag holder?

- You need to be able to take bags out of it without the others spilling out
- It needs to be able to hang up
- It needs to look attractive.

If available, show some examples of carrier bag holders.

- How have these been made?
- Has a piece of clothing been used?
- How has it been put together?
- How can you hang it up?
- Why don't the bags fall out?
- How has it been decorated?



Pupils at Rotherham's Anston Park Junior School demonstrate the plastic bag problem

Step three – making the bag holders

- Divide the children into groups of six with one sewing kit per group.
- Provide each child with one of the sleeves or legs. One end of the sleeve or leg will have been cut, the other should be intact.

If the material is woolly e.g. jumper or pullover:

- Fold the bottom end over like an envelope and sew a hem/cuff wide enough to accommodate the elastic that will go inside.
- Make a hole with a pencil on the inside of the hem/cuff so that the elastic can be threaded through. Do not cut a hole as the knitting will unravel!

If the material is a tight weave e.g. jeans, cotton tops and shirts:

- The hem can be sewn (as above) or stuck down with self adhesive Velcro. The hem needs to be wide enough to thread the elastic inside.
- Make a hole for the elastic on the inside of the hem using a hole punch or scissors.

Then, for both types of material:

- Thread the elastic through the hole, keeping hold of one end. When the elastic has gone right round, tie the two ends into a firm knot.
- Add a loop of fabric to the top of the bag holder for hanging.
- Add decorations made from scrap material, buttons and bits of wool.

Once the holders are finished, ask the children to take them home and explain to their parents how and why to use them.

Reuse around the world

What is reuse?

Reuse means using a product or material again without reprocessing it. It might be used for its original purpose or a different one. For example, a glass milk bottle may be reused for its original purpose to hold milk more than 10 times. Or an old car tyre might be reused in a completely different way as a swing in a school playground.

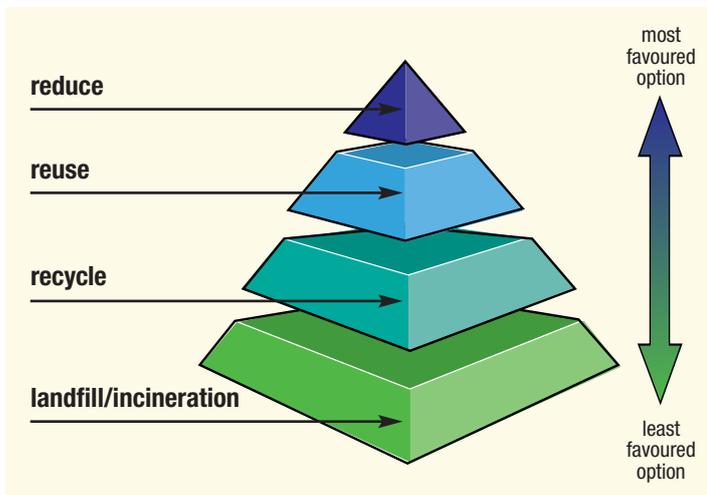
The benefits of reuse are that it:

- sends less waste to landfill and so reduces waste disposal costs and damage to the environment
- saves energy and raw materials as new products are not being manufactured
- helps those that need reused items
- can generate income for charities and create opportunities for jobs and training

Reuse is different from recycling. Recycling involves goods or materials being re-processed into something else. There can be confusion though – sometimes things that are described as recycled are in fact reused.

The waste hierarchy

The waste hierarchy tells us which options for dealing with waste are the most desirable. On the waste hierarchy diagram below, reuse is higher than recycling because it does not use the amount of energy required to recycle materials and is therefore even better for the environment.



The waste hierarchy

Activity - reuse in the UK and Africa

Research one example of reuse in the UK and one in Africa using the websites below as a starting point.

UK

- Textile Recycling for Aid and International Development (TRAID) www.traid.org.uk – reuses materials to make new highly fashionable garments.
- The Bike Station www.thebikestation.org.uk – one of a number of organisations that reconditions old bikes for reuse in the UK.
- Children's Scrapstore www.childrenscrapstore.co.uk – one of many scrapstores around the UK which supply waste products to be reused for art, craft and play activities.
- Worn Again www.wornagain.co.uk - Worn Again shoes (as shown on the cover) are made from old clothes, towels, blankets, car seat scrap leather and recycled rubber.
- Furniture Reuse Network www.frn.org.uk - the national co-ordinating body for 300 furniture and appliance reuse and recycling organisations in the UK.



Africa

- Original T-Bag Designs www.originaltbagdesigns.com - African organisation which reuses tea bags in their art and giftware.
- Re~Cycle www.re-cycle.org - collects and ships second hand bicycles to local partners in parts of Africa.
- Vision Aid Overseas www.vao.org.uk – collects spectacles for reuse in developing countries and trains local people in eyecare skills.
- Digital Links International www.digital-links.org - charity that provides affordable access to technology for people in developing countries.
- Tools for Self Reliance www.tfsr.org - works in four African countries providing craft workers with tools and the skills to use them.



Picture: Tools for Self Reliance

Use your research to produce two case studies about reuse in these parts of the world. The case studies should include the following:

- Where the project is based
- Which material / product is being reused and how
- What the product or material is being reused for
- The benefits of reuse for that community
- The environmental benefits
- Any disadvantages that might be associated with the reuse. For example, could exporting items to Africa for reuse hinder the setting up of local businesses to make these items? Is the technology appropriate for the area to which it is being sent?

Get involved!

Why not set up a scheme or even a business for reusing at school? You could follow the example of students at Ellesmere Port Catholic High School (page 2) and design a campaign to encourage people to buy reusable plastic sports bottles. Why not purchase sports bottles from a local supplier (be sure to ask them for a discount in return for free advertising) and sell them at school for pupils to reuse? Profits could fund improvements to your school grounds or sports facilities.

Alternatively, use your school library as the base for a scheme to swap second-hand books, magazines, games, CDs and DVDs. You will be able to keep up with the latest fashion and gossip whilst saving both money and the environment.

For those planning to go into big business, what better way to start reuse than by trading your unwanted items over the Internet? Everyone knows about e-Bay but there are other similar websites listed on page 8.



A whirlwind tour of issues relating to reuse

The figures

- Each UK household produces more than 1 tonne of rubbish annually, amounting to more than 30 million tonnes each year.
- Up to 80% of household waste can be reused, recycled, or composted. The percentage being recycled is increasing year on year (currently at around 23%). However it is much harder to put a figure on the amount of material being reused.
- Glass milk bottles are reused an average of 13 times before being recycled. Other bottles are usually used only once before being recycled or thrown away.
- Plastic carrier bags are easily reused, but despite this we use 150 million in the UK every week.
- If every household reused just two feet of gift wrapping ribbon each year, the resulting 38,000 miles of ribbon could tie a bow around the earth!

The issues

- We are more aware about recycling than ever, thanks to campaigns such as Recycle Now and the increasing availability of recycling collections. However, reuse has a much lower profile. As recycling becomes an established part of everyday life, the next challenge is to encourage reuse and other forms of waste minimisation.
- Reuse is better for the environment than recycling, resulting in even less energy use and pollution.
- Reuse is not a new idea. During the Second World War, people were encouraged to 'make do and mend' rather than buying new items.



- New methods of reuse have appeared in recent years, including schemes for the reconditioning and reuse of old computers and mobile phones, and reusable nappy schemes for those with young children. The internet has opened up exciting new opportunities for reuse through websites such as www.ebay.co.uk, www.freecycle.org and www.rag-and-bone.co.uk.

The politics

- In May 2005 the Office of the Deputy Prime Minister (ODPM) dropped plans for councils to report the amount of household waste sent for reuse. However councils must still report the tonnages sent for recycling, composting, energy recovery and landfill.
- One reason why these plans were dropped was because much of this waste is collected by charities and other small organisations and it was considered unreasonable to require these to weigh the items they collect.
- The ODPM was also concerned that the complexities of monitoring reuse would be out of proportion to "what is in reality a very small element of the waste stream."

Reuse at school

- Use both sides of paper before you recycle it or throw it away.
- Collect in photocopied worksheets and store them so they can be used again next year. This will save teachers work too!
- Encourage pupils to bring drinks in reusable 'sports bottles'.
- Organise a special day to emphasise the value of reuse. Advertise it using posters made from scrap paper, textiles and other old materials.



Sort out your unwanted toys for someone else to reuse

Reuse at home

- Keep containers and other items of packaging you could use again.
- Speak to your local council recycling officer about local reuse schemes for unwanted furniture, computers, mobile phones and other items.
 - Reuse envelopes by sticking a label over the old address.
- Swap magazines and newspapers when you have finished reading them.
 - Buy milk in reusable glass bottles.
- Use a 'bag for life' instead of getting a new plastic bag each time you go shopping.
- Refill printer cartridges and use rechargeable batteries. You will protect the environment AND save a fortune.
 - Give old clothes, toys and books to jumble sales or charity shops.
 - Buy second-hand goods whenever possible.

Remember ... one person's trash is another person's treasure!

Run different reuse activities throughout the day, including:

- Create art, costumes and musical instruments from rubbish
- Make a plastic carrier bag holder (see page 6)
- Brainstorm ways in which the school could reuse items and incorporate these into a school waste action plan or environmental policy
- Hold a bring-and-buy sale or toy and book swap to which parents are invited