

What is upcycling?

Upcycling, also known as creative reuse, is the process of transforming by-products, waste materials, useless, or unwanted products into new materials or products of better quality and environmental value.

Brief

Design and make a product which will encourage wildlife to visit your garden using something recycled from your home. This could be anything from a tin can, to a milk carton. You can make more than one, you may even wish to make a range of products. The most important thing is that you have fun and get creative!



Ideas

There are lots of ideas on the following slides to get you started.

Please email a photograph and a brief description of your finished upcycle projects to Miss Milbank – milbank_m@bexleygs.co.uk

You have until the end of the summer term to send your designs.

Materials and the environment

Reusing materials means to make new products means that less materials need to be obtained in the first place. Because **paper/card** come from trees, cutting trees to create make these materials leads to deforestation – forests don't survive and the less forest we have the more co2 escapes in to the atmosphere

Most **plastics** are made by extracting crude oil from the ground/sea bed and processing it several times to create the plastics we use every day. As well as having a detrimental impact on creatures, eco systems and habitats, plastics do not biodegrade (break down naturally) and therefore end up in landfill sites, the sea or have to be burned, which also adds dangerous levels of a range of chemicals in the atmosphere.

In Design Technology we use the 6 R's when considering how we might use materials more responsibly in our design work. Read the 6 R's and think about how many of them you could consider when making your up cycled garden product.

The 6 Rs

The term 'the 6 Rs' can be applied to the design of new products or when a product is finished with, used up or no longer wanted. Here are some questions to prompt 6 Rs thinking:

- **Reduce** - Think of a package that was bought recently. Could any part of the packaging be reduced?
- **Reuse** - Rather than disposing of a package once you have opened it, could it not be reused?
- **Recycle** - Many papers and boards are made from material that is fully or partly recyclable. Can the paper or board be disposed of correctly so that it can be recycled?
- **Rethink** - Rethink how actions contribute to damaging the environment. Rather than buying a coffee that is served in a disposable, laminated card cup, why not buy a cup that can be refilled?
- **Refuse** - Consumers have a huge amount of power when it comes to the choices they make when buying, including refusing to buy a product if they believe it is bad for the environment. Could a material that is sustainable be used instead?
- **Repair** - Many products are designed to be **obsolete** after a given period. When a product is broken, can it be repaired rather than discarded? If a repair can be carried out on the product, it could remain out of a landfill site for much longer.

Year 7 Induction Upcycle Project



Year 7 Induction Upcycle Project



DIY Planter Ideas for All Skill Levels



Year 7 induction Upcycle Project



Plenary

What materials did you use to make your product?

Could you do some research online to find out how those materials are made?

Will your product be easy to repair if it breaks? Can it be easily taken apart for recycling when it is no longer needed?

What might you refuse to buy in the future because of what it is made out of?

