

Virtual Learning!



Archbishop LanFranc School

Year groups Designing Graphics Electronics Materials **Manufacturing** Tools Software

Manufacturing



Joining materials

Wood joints

Joining timber using components

Industrial production techniques

Scales of production

The environment

Environmental issues

Renewable energy

Environmental issues



Humans have a great impact on our environment every day; now think about your morning and how you got to school? Billy woke up and had some cereal he then threw the empty cardboard cereal box away and the empty plastic milk carton. Billy then thought how these products were made and what will happen to them next? Billy then realised that everything that is produced comes from the earth and has an impact on our environment.

All of the raw materials for packaging and products come from the earth and when they become waste they are still with us in some form. When designing products you need to consider the points below:

Design issues:-

Examples:-

Will your product have a good or bad effect on your environment? (This television has been dropped in a tip).



Can you use less material and ensure less waste in the making of your product and its packaging? (This cardboard sandwich packaging is more environmentally friendly than a plastic one).



Can your product be easily recycled? (This purse is made from coke cans).



Can you re-use recycled materials within your product? (This chicken is made from plastic bags).



Can you use biodegradable materials within your product (Materials that can be broken down by the environment easily, this packing material is biodegradable).



Can you use less energy in the production of your product? (This dynamo uses no batteries because it is powered by the power from the bikes wheel).



Will your product have any toxic waste such as batteries or the manufacturing process used? (A leaking battery).



Useful web links



Recycle more

View the recycle-more schools web site. See what you can do to help!

www.recycle-more.co.uk >>

Technology student

View the technology students environment pages.

[Environment pages](#) >>

Recycle city

Explore the recycle city and name products that can be recycled.

[View the recycle city](#) >>

Alpro site

Learn more about recycling aluminum cans in teh UK.

[View the alpro site](#) >>

Are any parts of your product hazardous to the environment? (Hazardous chemical waste).



Can you reduce the amount of energy used to transport your product to the shops? (A truck transporting a house).



Can you use environmentally power sources such as solar, wind and wave power?



Is your product made from renewable sources (trees, plants, items that can grow back) or is it made from non-renewable sources (plastic, oil, coal, items that can not grow back)?



Recycle or re-use

The recycling symbol is often found on products and there packaging. This means the product is environmentally friendly. The symbol is below.

Many materials can be recycled and it is much cheaper and more environmentally friendly to re-use the products with the least amount of processing. Milk bottles and beer bottles are good examples of products that are re-used. But plastic milk cartons and plastic drinks bottles are not re-used.



One way we can reuse more effectively is to create standard parts. If all jars were the same we could refill them with a different product.



Quiz time!

Mr DT says 'Read the text above and then answer these questions below'. Write your answers on a sheet of paper, don't forget to write your name on the sheet!:-

Design issue questions!

- 1.) Name the products you have thrown away if the last twenty four hours?
- 2.) Name four environmental design issues you should consider when designing?
- 3.) What are biodegradable materials?
- 4.) Explain what renewable and non renewable materials sources are?

Recycle or reuse questions!

- 1.) Draw the recycle logo above.
- 2.) What does the recycle logo mean?
- 3.) Give an example of a product that can be re-used?
- 4.) Name one way how we can reuse products more effectively?



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