

Paper Making (Key Stage 2)

Season: All year		Duration: 1-1.5 hours													
<p>Overview Experience recycling in action! We bring everything needed for your class to discover how the paper they put in the recycling box is recycled on an industrial scale and the advantages of this over land-filling waste paper and/or making paper from wood pulp. We then get stuck into making our own beautiful recycled paper. In longer sessions we also have fun making fabulous paper-bead wristbands using old magazines or wrapping paper.</p>															
<p>Learning Objectives</p> <ul style="list-style-type: none"> • Why it is important to recycle paper. • The difference between recycled and non-recycled paper. • Where to put waste paper for recycling at home and at school. • To identify the processes involved in recycling paper. • To understand the environmental advantages of using products made from recycled paper. 		<p>Key Vocabulary</p> <table> <tr> <td>Waste</td> <td>Reduce</td> </tr> <tr> <td>Rubbish</td> <td>Reuse</td> </tr> <tr> <td>Landfill Site</td> <td>Recycle</td> </tr> <tr> <td>Environment</td> <td>Paper Mill</td> </tr> <tr> <td>Paper Pulp</td> <td>Pollution</td> </tr> <tr> <td></td> <td>Sieve</td> </tr> </table>		Waste	Reduce	Rubbish	Reuse	Landfill Site	Recycle	Environment	Paper Mill	Paper Pulp	Pollution		Sieve
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<p>National Curriculum Links</p> <p>Science: Sc3 Materials and their properties 2: Changing materials</p> <p>Geography: 5 : environmental change and sustainable development: a: Recognise how people can improve the environment or damage it and how decisions about places and environments affect the future quality of people's Lives. b: Recognise how and why people may seek to manage environments sustainably, and to identify opportunities for their own involvement.</p> <p>Citizenship: 2: Preparing to play an active role as citizens: a: To research, discuss and debate topical issues, problems and events. j: That resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment.</p> <p>Design and Technology: 2: Working with tools, equipment, materials and components to make quality products.</p>															
<p>Resources to be provided by school: Interactive Whiteboard or projector and screen, drying rack, sink, newspaper (to put finished paper on when drying), scissors, pencils, Pritt sticks or similar.</p> <p>Materials for children to bring from home: old magazines or old wrapping paper.</p>															
<p>Outline of Activities with approximate timings: Please note: We can tailor activities to suit the abilities of your class and time available.</p> <p>Introduction (15 minutes): Using a short power-point presentation and props we identify:</p> <ul style="list-style-type: none"> • What happens when rubbish is recycled (focus on paper) ? • What are the advantages of recycling waste paper instead of sending it to landfill? • What are the advantages of using recycled paper instead of paper that has not been recycled? • Which common items are made from recycled paper? 															

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Outline of Activities (continued):

Making recycled paper (30 - 45 minutes) :

Demonstrate paper-making process to the whole class. Then divide class into smaller groups. Each group will have a set of paper-making equipment (bowl of pre-made paper pulp, rectangular piece of plastic mesh, J-cloths, sponges and newspaper etc), enabling the whole class to be involved in paper making at once. Alternatively for large classes or longer sessions, set up one paper making table and have a group at a time paper-making while the rest of the class re-use old magazines to make paper bead wristbands.

Making paper bead wristbands (30– 45 minutes):

Demonstrate how to make beads by tightly rolling thin strips of old magazines or wrapping paper. Children then use templates to cut strips, glue and roll into beads, which can then be threaded onto elastic to make colourful wristbands.

Additional activities (time dependent):

- Envelope making: Make a scrap paper (or magazine) envelope to go with your paper.
- Tell the paper story: Can you put the paper-making pictures in the right order and re-tell the paper making story?

Eco– Schools Links:

Curriculum-linked activities and practical action on paper use, waste and recycling in school could be used as evidence towards an Eco Schools Award. For more information visit:

<http://www.keepbritaintidy.org/ecoschools/>

Suggested follow-up activities:

- Use your hand-made paper to make an extra-special greetings card, fridge magnet and/ or other seasonal decorations.
- Investigate how paper is used at your school: How much paper is used every day/ week/ term? What is it used for? How could your school use less paper? Is the paper used for printing/ photocopying/ art/ displays/ exercise books recycled paper? What happens to waste paper? Are there recycling boxes and scrap paper trays in each classroom so that paper is used fully before it is recycled?
- Literacy link: Write instructions for how to make hand-made recycled paper.
- ICT link: research the process of making paper from trees - how is it different from making recycled paper? Why is it better for our environment if we use products made from recycled paper rather than trees? What is the FSC logo and how does it help the world's forests? <http://www.fsc-uk.org/>

Useful websites:

http://www.recyclenow.com/how_is_it_recycled/paper.html: cartoon showing paper-making process.

http://www.paper.org.uk/information/pages/school_resources.html: Information about paper from the confederation of paper industries.

<http://www.aylesford-newsprint.co.uk/Students.asp>: Information about the producer of recycled newsprint who recycles Somerset's household waste paper.

<http://www.somersetwaste.gov.uk> : Local waste and recycling information, top tips and facts.

<http://www.recyclenow.com/schools/index.html>: lots of general recycling information, plus tips and resources for schools.

<http://www.wastebuster.co.uk/> : Join Busta and Pong on their waste busting mission! Fun children's activities plus ideas and resources for teachers.

http://www.reduceuseandrecycle.co.uk/greendirectory/kids_green_sites.php : directory of fun, environmental- themed websites for children.