

Paper Making

Teachers Guide



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KESAB Waste and Recycling Education

KESAB is a non-profit community organisation which works with people to restore, preserve and improve the total environment. KESAB offers interactive programs to schools and the wider community, presenting programs relating to KESAB's objectives, national curriculum and community interest.

The classroom activities included in the resources section that complement this guide have been sourced from the *RRR You Ready: The NYC Teachers RRResource Guide*, 2001. Activities are included for different age groups, please read through all the activities and adapt them to your classes particular needs. It would be most beneficial if the students use their visit from KESAB as part of a larger unit of work.

Overview

Students will gain skills and knowledge in:

- the process of recycling paper
- identifying properties and uses of different paper and cardboard products
- designing and planning a paper recycling program for their classrooms

Students can participate in:

- a discussion on the uses and history of paper and papermaking
- a demonstration on making hand made recycled paper
- viewing a video about paper making
- making their own paper, and marbling pre-made or standard white paper

Key Understandings

- Paper is made from an organic material and can decompose
- We need to conserve natural resources and to reduce the amount of waste going to landfill
- The technique of papermaking has been known to people for centuries
- Some native or rainforest timbers may be used to make paper
- paper can decompose in a compost bin
- all gable top milk and juice cartons can be recycled
- cartons need to be rinsed and crushed before recycling
- drink cartons can be recycled into high quality office paper
- timber forests are sustainably managed and regrown especially for paper products and timber
- to make paper, wood is reduced to fibrous pulp, mixed in water, spread into a thin sheet and dried
- paper packaging has many advantages over to other materials
- people can make choices to reduce paper litter and minimise its waste
- The characteristics of paper are different to other materials such as plastic, aluminium, steel, glass, etc
- There are variations in the physical properties of different paper products in regard to density, strength, light transmission, ability to tear, decompose and be recycled.
- Different paper products are specifically selected to be used for different purposes.
- Paper must be sorted into types prior to being recycled
- Newspapers and magazines are recycled into more newsprint

Key Vocabulary

Please ensure your students are familiar with the following vocabulary before your class visit from KESAB Education Services.

paper	tree	wood	cardboard	environment
litter	bottle	factory	landfill	water
reuse	reduce	recycle	forest	resource
supermarket	rot	waste	garbage	rubbish

Links with the SACSA Framework: Early Years Band

LEARNING AREA	STRAND	KEY IDEAS	Essential Learnings	Key Competencies
English	<i>Strategies</i>	1.9 Uses strategies for listening attentively to ideas and opinions in a range of spoken texts.	T	KC2 KC6
			C	
Society and Environment	<i>Time, Continuity and Change</i>	1.1 Identifies differences between their life and the lives of other generations in their society and explains some reasons for this.	Id	KC1
			In	
	1.2 Presents events and life stages in sequence.	C	KC2	
		F		
	<i>Place, Space and environment</i>	1.6 Participates actively in projects to show understanding of the importance of caring for local places and natural environments.	T	KC3 KC4
			In	
<i>Social Systems</i>	1.10 Describes the meaning of 'needs' and 'wants', and identifies how people cooperate in society to meet current and future needs.	F	KC1	
		In		
1.11 Identifies the sources of some goods and services, and can explain the ways our daily living depends on them.	In	KC1		
	T			
			C	

Design and Technology	<i>Critiquing</i>	1.1 Makes judgments about the significance of different characteristics of products, processes and systems made by themselves and others.	T	KC1
	<i>Making</i>	1.5 Explores current and alternative uses of materials and equipment in creating products, processes and systems.	F C	KC1
		1.6 Understands the importance of simple organisation and safety issues in terms of their consciousness of people and fairness.	Id In	KC1
Mathematics	<i>Exploring, Analysing and Modelling data</i>	1.2 Uses everyday comparative language and number to describe the data they have generated in parts and as a whole and describe how the data assists them to answer their own questions.	C	KC2
Science	<i>Energy Systems</i>	1.3 Identifies sources of energy and describes the ways in which energy is used in daily life.	T C	KC1 KC2
	<i>Life systems</i>	1.5 Investigates the features and needs of living things, and demonstrates an understanding of their interdependence with each other and the physical world.	In T C	KC1
	<i>Matter</i>	1.7 Identifies properties of materials that are observable through the senses and recognises the uses of these materials.	T C	KC1
		1.8 Identifies and predicts materials that change and do not change.	T	KC1