

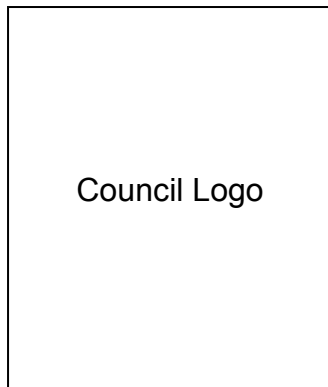
waste education in Queensland

Reduce, reuse, recycle, compost – it's going around.



**school waste
minimisation
resource**

This resource was developed by the Environmental Protection Agency – Queensland to assist local communities to minimise the environmental impacts of waste.



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A GUIDE TO DEVELOPING A SCHOOL WASTE MINIMISATION AND LITTER REDUCTION PLAN

Education for waste minimisation, including litter reduction and recycling, allows teachers to meet learning outcomes in a range of curriculum areas. It also has a wider community benefit; it may teach participants the correct procedures for recycling in their local area or the importance of disposing of litter thoughtfully.

Increasingly, schools are attempting to implement activities that engage students in analysing and solving real life problems. The value of such activities is recognised by Education Queensland through the 'New Basics Project'. This aims to prepare students for the future by encouraging activities involving organisation and time management, interpretations of ideas and data and the application of knowledge beyond the confines of the school.

The development of waste minimisation and litter reduction plans can provide opportunities to meet many of these aims. The following guide may be provided to local schools to assist them in developing and implementing waste minimisation and litter reduction programs.

The Process

The following information provides a step by step guide to the development and implementation of a school waste minimisation or litter reduction plan. Specific strategies of a plan will be determined by a range of factors, including school size, location, wastes generated and available finances.



A successful waste minimisation or litter reduction plan can deliver a range of outcomes both for your school and your students, including

School Outcomes

- Reduction in waste disposal costs
- Improved school and local environment
- Development of sustainable practices in the school

Student Outcomes

- Experience in analysing and solving real life problems
- Development of cooperative work skills
- Knowledge to make informed decisions concerning waste and associated environmental issues

Step 1 - Identify the Issue

Why?

- Clarifies why this issue needs to be tackled
- Determines what is known about the issue, including a review of existing policies
- Identifies support from other areas of the school

How?

- Discussions with key stakeholders
- Form a task force or action group
- Call for suggestions and input from the school community

Outcomes

- A clear understanding of the issue and what needs to be achieved
- Committed group of key people

Remember...

Use all available means to seek ideas and opinions, including newsletters, staff meetings and announcements at assemblies. Spread the net widely to include all members of the school community, including parents; you may find an expert composter or someone with connections to a recycling company.

The Waste Hierarchy

The Waste Hierarchy describes the principles of waste minimisation and their level of importance – **Reduce, Reuse, Recycle**. A school waste minimisation plan should always seek to reduce or reuse waste prior to looking for a recycling service.

Reduction of waste in schools may involve reducing packaging from the tuckshop, such as dispensing sauce from a large container rather than providing individual sachets or removing disposable coffee cups from the staffroom.

Reuse may involve using waste paper from the photocopier for note paper or utilising containers from the tuckshop for storing art materials such as pencils and brushes.

Recycling may include organising a collection service for paper (if available) or recycling food scraps in a worm farm or compost bin.

Step 2 - Collecting Information & Data

Why?

- Provides specific information from which to develop a plan
- Baseline information measures the success of the program
- Clarifies scope of the issue

How?

- Surveys - students can develop and carry out surveys and questionnaires seeking information, such as why people litter
- Audits - collecting and sorting waste materials will provide important information in regard to volumes and types of waste. Audits also provide excellent opportunities to develop skills in data collection
- Mapping - use plans of the school and identify litter bins, litter hot spots and sites of waste generation, such as the photocopy room or tuckshop
- Record review – examining waste disposal costs and associated details assists to develop a picture of waste production over time

Outcome

- Accurate information on the issue, including volumes and types of materials, sites of generation and understanding of attitudes contributing to the issue.

Remember...

The information collected at this step will not only provide the foundation for your plan it can also be used to promote the issue and encourage correct participation. Developing large colourful graphs, posters and displays can all assist to raise the profile of your plan.

Why not calculate the volume of litter the school produces in a year or the number of sheets of paper used for photocopying and represent this using wheelie bins at a school assembly.

A successful waste minimisation plan should reduce the costs of waste disposal through a reduction in the volume of waste produced. Seeking information on the cost of waste disposal for the school and estimating potential savings can be a powerful tool in securing support for your plans from the school administration.

Step 3 - Developing a Plan

Why?

- Determine aims and objectives and identify and prioritise key issues
- Determines the most effective method or methods to deal with the issue
- Set timeframes
- Determines what is needed to solve the issue, including an assessment of practical options and equipment and resources required
- Determines what will be achieved by the plan (short, medium and long term)

How?

- Evaluation of collected data and information – students will be able to identify key areas and issues
- Discuss and analyse potential methods – consider the logistics of the plan and what additional responsibility it may place on key staff such as cleaners and ground staff

Outcome

- A framework which will allow the plan to be sustained over a long period and enable participants to measure the effectiveness of the plan

Remember...

Prioritising key issues and focusing on successful implementation of associated strategies often sets the foundation for the future success of the overall plan.

For instance, establishing a successful paper recycling program, (prior to tackling more complex issues such as composting), provides important positive feedback to the school community and allows students to gain valuable experience in practical aspects of the plan. Subsequently more complex issues, such as composting, can be tackled more effectively in the next cycle of waste minimisation planning.

The following provides some ideas for waste minimisation and litter plans.

Litter

- Encourage parents and students to bring low-waste lunches, including reusable sandwich bags and drink containers.
- Provide incentives to ensure common litter items such as chip packets and sandwich wrap are disposed of correctly
- Where possible dispense lollies and cakes directly into a students lunchbox or hand
- Develop a litter bin painting project

Food & Organic Waste

- Establish a worm farm or compost heap
- If possible consider getting some chickens for the school
- Establish a vegetable garden and provide herbs and vegetables to tuckshop, staff and students

Paper & Cardboard

- Develop printing and photocopying policies that discourage excess printing and encourage double sided printing
- Place paper reuse boxes in all classrooms and office areas

Other Recyclables

- Organise a collection cage for aluminium cans
- Liaise with your local Council (where appropriate) to arrange for the collection of plastic drink bottles and other recyclables

Step 4 – Implementation & Marketing

Why?

- Clearly informs the school community what their role will be in the waste minimisation or litter reduction plan
- Encourages students to understand the reason for the plan and to develop ownership of the plan
- Meets agreed aims and targets
- Elicits support from other sectors of the school community, e.g. P&C Groups

How?

- Awareness raising strategies – students can develop jingles, posters and deliver presentations to other students outlining the various elements of the plan
- Assigning key positions – i.e. recycling bin monitors, litter patrol group
- Monitoring progress and keeping records

Outcomes

- Development of an environmental ethic and the start of a process to reduce waste and litter production.
- Students become aware of individual actions that can contribute to environmental improvement
- Provides an incentive to tackle other issues associated with waste management and the environment

Remember...

Consider trialling elements of your plan in a section of the school to iron out any issues prior to implementing it across the whole school.

Providing incentives, such as awards for tidiest areas or the most paper recycled provides a useful competitive element and encourages the development of appropriate behaviours.

Asking students to develop media releases and distributing to local newspapers or radio stations can assist in promoting the plans, through both the school and broader community.

Step 5 – Monitoring & Evaluation

Why?

- Ensures stated aims and outcomes are met
- Identifies the strengths and weaknesses of the plan and determine how it can be improved
- Identifies new needs and priorities as issues are addressed or controlled

How?

- Comparison with baseline data collected in Step 2
- Follow up audits or data collection processes
- Interviews with key people
- Seeking comment from key personnel in the school community

Outcomes

- Identify future targets and opportunities
- Opportunities to provide positive feedback to the school community

Remember...

Ensuring that tools for recording information such as volume and types of waste are included in the plan development (Step 3) will provide valuable information during the evaluation process. Such tools can include simple data recording sheets that can be attached to bins or sections of the school website where students can enter data each day.

Congratulations if you have completed Step 5 you have successfully reduced waste or litter at your school. However, don't stop there use the same process to tackle another issue and continue the good work.

Enter the Keep Australia Beautiful Green & Healthy Schools Program to promote your efforts state-wide.

Lesson Overview

The following lesson plans have been divided into three collective grade categories. Each of these categories addresses waste minimisation and litter reduction issues as outlined below.

Year 1 - 3	Litter Introduction to litter issues. Reinforcing message of 'do the right thing'.	Composting Introduction to organic materials. The do's and don'ts of composting.	Recycling An introduction to recycling. Focusing on the paper recycling process.
Year 4 - 5	Recycling Linking the natural resource to the made product and how recycling preserves these resources.	Waste Minimisation Minimising waste in relation to becoming a powerful consumer.	Recycling in Nature Focus on organic waste in the environment
Year 6 - 7	Recycling Motivating people to recycle through different mediums	Waste Minimisation Understanding the role of packaging. Exploring the advantages and disadvantages.	Litter Reduction Investigating the environmental impacts of litter.

Litter Bugs

Colour in the pictures showing Andy putting his rubbish in the right place.



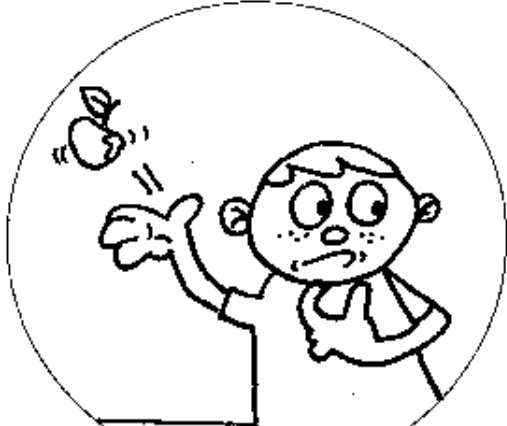
Andy thinks that nobody is watching him. Is that the right way to get rid of his rubbish?



Andy has found a great place to put his used lunch wrap.



Andy knows that he can recycle his drink can. Is he doing the right thing?



The bell has just gone and Andy is in a hurry to play. What could he do with his rubbish?



Andy has finished eating his chips. Yum! He knows that there is a great place to put his empty packet.



Andy knows that there is a place for all his rubbish. Great job Andy!

WASTE MUNCHERS

Harvey needs your help! Colour in the things that can be put into a compost bin.



Composting is great!

- Compost makes our gardens grow up nice and healthy.
- Compost helps us to save water on our gardens.
- Compost lets us reuse our kitchen and garden waste instead of sending it to the landfill.

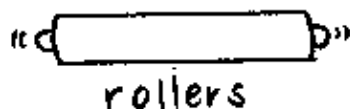
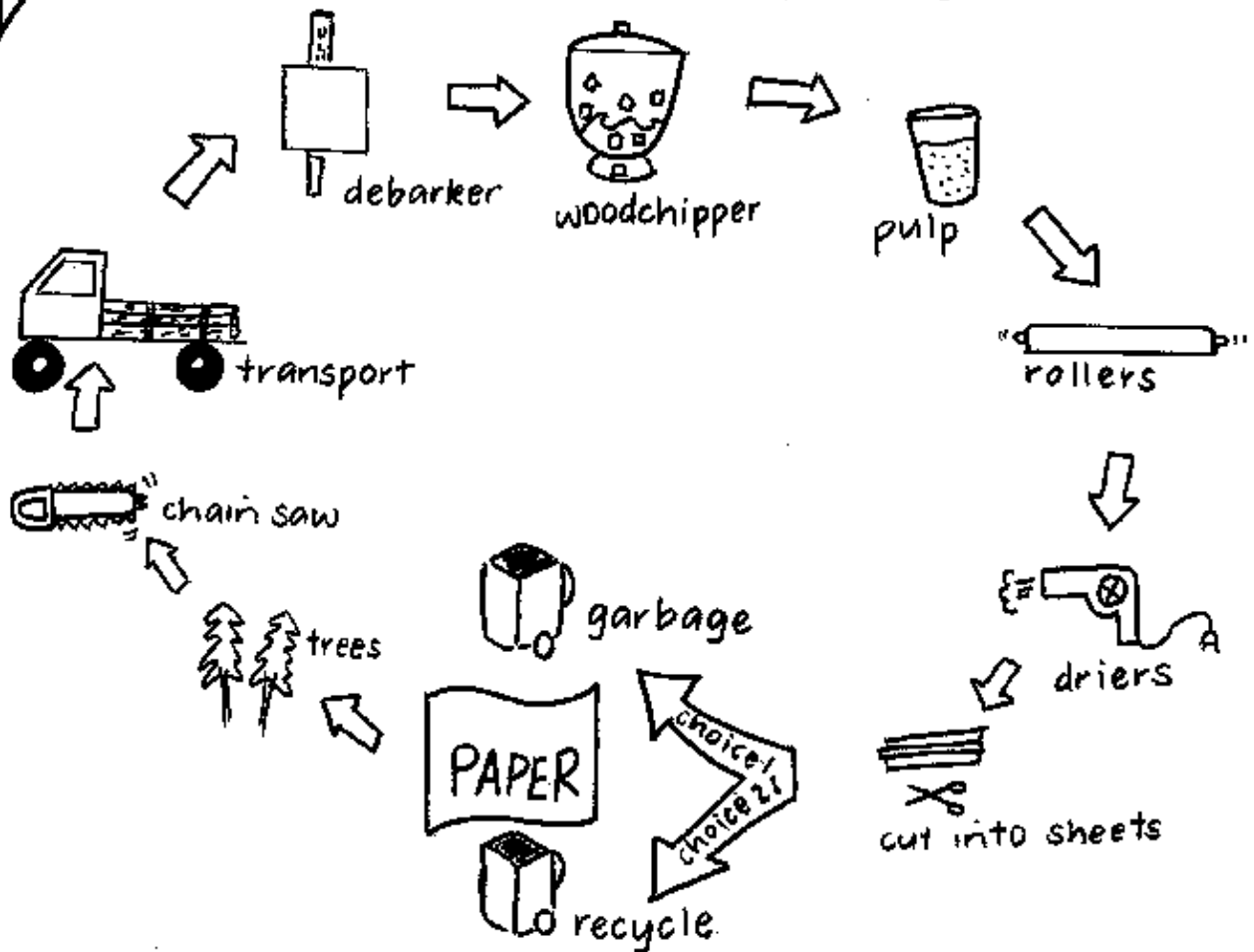
Native Notes

Topic: Topic Focus:	Recycling Why is it a good idea to recycle paper?
Grades:	1 – 3
Resources Required:	<ul style="list-style-type: none">• Paper poster• Worksheet: 'Native Notes'
Background Information: Tip <i>Contact Council to access recycling stickers and brochures.</i>	<p>Paper comes in many different forms, but it is all originally made from trees. Trees have a very important role in producing the air that we breathe. Trees also provide wildlife with homes and help stop the soil from eroding.</p> <p>Reusing and recycling paper assists in reducing the number of trees cut down each year to make paper products. Reusing and recycling paper also reduces the amount of waste going to landfill.</p> <p>Paper that is recycled is made into new paper products such as new newspapers, cardboard boxes, writing paper, packaging or even kitty litter.</p> <p>Schools produce large amounts of paper waste that could be reused and recycled instead of sent to the landfill by doing the following things:</p> <ul style="list-style-type: none">• Use both sides of each piece of paper• Set up a paper recycling system in the school• Photocopy both sides of paper• Use old magazines and newspapers for art• Print school newsletter on both sides of paper
Activity: 'Native Notes'	<p>Ask the students to take a deep breath in and out. Pose the following questions:</p> <ol style="list-style-type: none">1) What cleans our air for us so that we could take a nice big breath of fresh air? (trees)2) What are some other reasons why trees are important to others and us? (List them on the board)3) Did you know we also use trees to make paper and cardboard? <p>Using the worksheet 'Native Notes':</p> <ul style="list-style-type: none">• Describe how paper is made, explaining the basic processes in collecting, transporting and processing.• Ask the question, "Once we have used our paper and we throw it in the waste bin where do we get more paper from?" (trees)• Decide at what stage of the paper making process recycled paper would begin.• Review the steps required to make paper from trees and compare the impact with recycled paper. <p>Worksheet: 'Native Notes'</p> <ul style="list-style-type: none">• Ask students to trace the arrows outlining the paper process in red.• Direct the students to draw green arrows outlining the recycled paper process and colour the symbols.

Native Notes

Trace the arrows showing the paper process in red.

Draw in the arrows showing the recycled paper process in green.













Material Match

Topic: Topic Focus:	Recycling Where do our products come from and where do they go?
Years:	4 – 5
Resources Required:	<ul style="list-style-type: none"> • Worksheet: 'Material Match' • Common recycled materials (i.e. steel cans, cardboard, paper, aluminium cans, glass)
Background: Prompt Point <i>Contact the Council to access information on the volumes and types of waste disposed of in your local area.</i>	Recycling is a natural process. Materials such as dead leaves and branches are recycled by bacteria and other organisms releasing valuable nutrients. These nutrients help other plants and animals to grow. Recycling in the home or at school is similar to recycling in nature. Products such as plastic, paper, steel, aluminium and glass are all derived from the environment, by collecting these materials and reprocessing them we can reduce the need to collect or harvest finite supplies of natural resources. The major benefits of recycling include: <ul style="list-style-type: none"> • Conserving natural resources such as sand and bauxite • Reducing waste to landfill • Reducing energy use and pollution associated with manufacture The following table illustrates the major natural resources and the processes used to make various materials. PRODUCT RESOURCES/SOURCE PROCESS <i>Steel</i> Iron ore Energy for heating and shaping <i>Glass</i> Sand + limestone + soda ash Energy for heating and shaping <i>Plastic</i> Oil + gas Energy for heating and shaping <i>Paper</i> Trees Water for softening, energy for mixing & rolling. <i>Aluminium</i> Bauxite Energy for heating and shaping Note: Energy is still required to make products using recycled materials however the amount required is significantly less. Consider making a steel product from raw materials requiring mining, transporting, crushing, smelting and other pre-processing compared to using recycled steel that may often only require melting and reshaping
Activity: 'Material Match'	To help students understand the concept of recycling, you may wish to ask the following questions: <ol style="list-style-type: none"> 1. What is recycling? 2. How does nature recycle? Using the Activity Sheet 'Material Match', determine the natural resources and processes required to make common products. You may wish to discuss the following points: <ul style="list-style-type: none"> • Where do these natural resources come from? • What environmental impacts may result from continued use of natural resources? • What are the benefits, (economic and environmental) of recycling?

Material Match

Draw a line matching the natural resource to the product.

Natural Resource
 Sand + Limestone + Soda Ash
 Iron Ore
 Bauxite
 Oil + Gas
 Trees

Product
 Steel
 Glass
 Plastic
 Paper
 Aluminium

Question Time:

1) What does 'recycling' mean?

2) List the benefits of recycling.

It's a Wrap

Topic: Topic Focus:	Waste Minimisation How can we minimise the waste output of our school lunches?
Grades:	4 – 5
Resources Required:	<ul style="list-style-type: none">• Worksheet: 'It's a Wrap'• Backpack containing: lunchbox and a drink bottle.• Plastic bag containing: a packet of chips, a can of drink and a sandwich in plastic wrap.
Background:	<p>Waste is apart of everyday living and is generated by all households. However, a large proportion of waste is unnecessarily disposed to landfills.</p> <p>The waste hierarchy assists us to consider the amount of waste we produce and provides actions to minimise waste. The waste hierarchy is sometimes referred to as the 3 Rs - Reduce, Reuse, Recycle. Reduce is considered the most important step in waste minimisation, followed by reuse and then recycle.</p> <p><i>Reduce:</i> (also referred to as avoid), Reducing the amount of waste collected, i.e. using alternatives to plastic bags or disposable cups.</p> <p><i>Reuse:</i> Finding alternative uses for waste products, i.e. using an empty ice cream container for a lunchbox.</p> <p><i>Recycle:</i> Manufacturing new products from waste materials, i.e. turning plastic milk bottles into wheelie bins.</p> <p>By considering some simple questions at the time of purchase we can all reduce the amount of waste we produce.</p> <ul style="list-style-type: none">• Do I need this?• When I'm finished with it, how will I dispose of it?• Is the same product available with less packaging or packaging that is reusable or recyclable?• Can this item be repaired?• Can this item be reused?• Can it be recycled or composted? <p>If a product cannot be avoided or reused, then you should try to recycle it wherever possible.</p>
Activity: 'It's a Wrap' Tip <i>You may wish to go a step further with this activity and evaluate items that may be purchased in the school's canteen.</i>	<p>Explain the concept of the waste hierarchy. Provide examples to explain each of the 3Rs.</p> <p>Using the worksheet, 'It's a Wrap', ask the students to:</p> <ol style="list-style-type: none">1. List 3 items that we often find in our lunchboxes. For example; a snack, a sandwich and a drink.2. Describe and list the packaging on all items found in the plastic bag.3. Identify whether the packaging could be reduced (avoided), reused or recycled.4. Explore the contents of the backpack and compare the differences in packaging. <p>Encourage students to discuss how they might be able to minimise the amount of waste generated from their lunch boxes.</p> <p>Consider:</p> <ul style="list-style-type: none">• Placing cakes and pastries straight into a lunch box instead of in a bag or in plastic wrap.• Use reusable plastic sandwich bags• Bring a drink in a recyclable container.



It's a Wrap

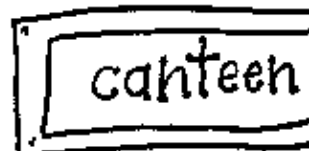


1. Draw the 3 items that Penny is having for lunch.

item 1

item 2

item 3



List the packaging for each item below.

item 1

item 2

item 3

2. Could any of this packaging have been reduced, reused or recycled? If so, list them in the box below.

3. Can you think of a better way to package the 3 items? Draw your designs in the boxes below. Don't forget to label your diagram.

item 1

item 2

item 3

Classroom Composters

Topic: Topic Focus:	Recycling in Nature How does nature recycle its waste?
Grades:	4 -5
Required Resources:	<ul style="list-style-type: none"> • Worksheet: 'Classroom Composters' • Worksheet: 'A Recipe for Compost'
Background: Prompt Point <i>Use your local environment to explain how nature recycles, mangrove forests, rainforests and estuaries are all good examples of how waste materials are continually recycled in nature.</i>	<p>Recycling is a natural process. Organic matter such as dead leaves and branches are recycled by bacteria and other organisms releasing valuable nutrients. These nutrients help other plants and animals to grow.</p> <p>We produce large amounts of organic waste every day. Organic waste refers to things that were once living. This includes fruit and vegetable scraps, paper, grass clippings and prunings from the garden.</p> <p>By establishing a compost heap or bin we can all recycle a proportion of our organic waste and produce a very good fertiliser for our garden.</p> <p>Composting relies on billions of organisms, many of them microscopic bacteria to decompose organic materials.</p>
Activity: 'Classroom Composters' Prompt Point <i>Your Council may have statistics on the amount of organic waste produced each year.</i>	<p>Using the worksheet, 'Classroom Composters' ask the students to list all the different types of waste produced in their household in one week. Record some of these on the board. Ensure you get a diverse list, i.e. paper and cardboard, fruit scraps, plastic bags, old clothes and grass clippings.</p> <p>Define the word organic and highlight all the different types of organic waste identified.</p> <p>Introduce the concept of recycling organic waste. Compare these items with recycling plastic bottles or steel cans by asking, "if we can turn a steel can into a car door what can we recycle a banana peel into?"</p> <p>Discuss the benefits of recycling organic waste. Consider the following reasons:</p> <ul style="list-style-type: none"> • Reduces waste going to landfill • Improves the health of our soil • Helps to grow plants, fruit and vegetables <p>Using the worksheet 'A Recipe for Compost' explain how the students can establish a mini compost system in the class and watch waste materials turn into soil. Highlight the ingredients needed and ideal requirements for successful compost. The teacher may even like to continue this activity at a later date. Suggest leaving a copy of the worksheet with them for further instruction.</p>

CLASSROOM COMPOSTERS

Write down all the different types of waste produced from your household over the past week in the bin below.



QUESTION TIME:

1. Write the definition of the word 'organic'.

2. Look at your list inside the bin. Circle all of the items that are organic.

3. Write the definition of the word 'recycle'.

4. How can organic material be recycled?

5. What are the benefits of recycling organic waste?

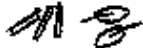
A Recipe for Compost

Ingredients

2 litre plastic bottle



A handful of small twigs and leaves



2 cups of food scraps



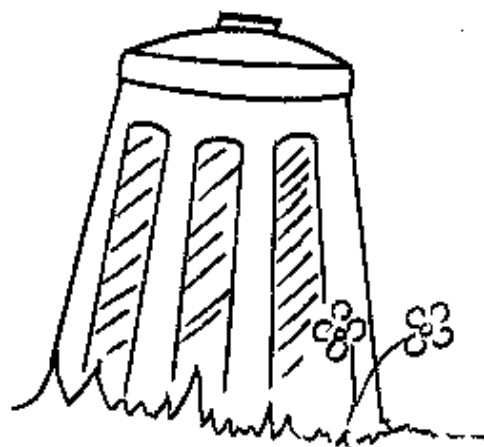
1 cup of water



2 cups of soil



A fork to stir your mini compost



Method

1. Ask an adult to help you cut the top off a 2 litre plastic bottle. Use the piece you have removed as a lid.



2. Put a thin layer of soil in the bottom of your plastic bottle.



3. Next, add another thin layer of twigs and food scraps. *HINT: If you cut up your scraps into smaller pieces, it will speed up the composting process.*



4. To keep your compost moist, add some water. Just enough to make it damp.



5. Continue to add different layers of soil as well as your garden and food scraps until your bottle is $\frac{3}{4}$ full.



6. Remember to continue adding water to keep your mini compost damp and most importantly, stir it with your fork regularly.

Serving

Your mini composter should be ready in about 6 to 8 weeks. Take your beautiful rich soil home and add it to your favourite plant. You plant will thank you for such a delicious treat!



Recycling Jingle

Topic: Topic Focus:	Recycling Why is it important to recycle?
Grades:	6 – 7
Resources Required:	<ul style="list-style-type: none"> • Recycling brochures and stickers • Recyclable items
Background: Tip Contact Council to access recycling stickers and brochures, if you have them available.	<p><i>Most communities have some form of recycling service. It may be a kerbside collection of mixed recyclables, a transfer station or drop off centre or the collection of glass bottles by community groups. Recycling is important for a number of reasons including:</i></p> <ul style="list-style-type: none"> • Reducing the need to mine or harvest natural resources such as trees, oil, bauxite, sand and iron ore. • Reduces the amount of waste going to landfill • Reduces the amount of energy needed to create new products; may reduce the volume of water required to make new products • Reduces the amount of greenhouse gases released to the atmosphere <p>Encouraging people to recycle correctly is critical; contamination of recyclable items can impact on the recycling process.</p>
Activity: ‘Recycling Jingle’ Tip A competition could be run and the winning jingle could be played to the school community or even on the local community radio station.	<p>Following are some questions you may like to ask the students:</p> <ol style="list-style-type: none"> 1. What does the term ‘recycling’ mean? 2. List all of the things we can recycle in our area. 3. Why is it important to recycle these items? <p>Ask the students to identify the importance of making sure that everyone in the community recycles correctly. To assist with this, present the students with the scenario that the Council is looking for a new recycling jingle to help raise awareness.</p> <p>Asking students about their favourite jingles from advertisements will help them to focus on this exercise.</p> <p>Note: <i>This activity can be undertaken during your visit, if time permits, or the teacher may wish to work with students on this activity.</i></p> <ul style="list-style-type: none"> • In small groups, the children create a jingle to encourage people to recycle. • The jingle should be no more than 30 seconds long and suitable for airing on the radio. • Record the children’s jingles on tape. • Have the students write their jingles on the ‘Recycling Jingles’ worksheet. Give the teacher the written work to display in their classrooms.

Litter Horoscope

Topic: Topic Focus:	Litter Reduction What is the life expectancy of litter once it has entered our environment?
Grades:	6 – 7
Resources Required:	<ul style="list-style-type: none">• Timeframe chart• Worksheet: 'Litter Horoscope'
Background: Prompt Point <i>Did your Council or Shire participate in Clean Up Australia Day? If so, contact your local Council to see if regional statistics are available.</i>	<p>Anything that is disposed of incorrectly is called litter, including small things like chip packets and big things like car tyres. Litter can degrade environments and damage or kill plants and animals. Litter is mobile; it can enter our waterways through stormwater drains or be blown long distances by the wind.</p> <p>We lose valuable resources when we litter, items such as drink cans and bottles cannot be recycled if they end up as litter.</p> <p>Many organisations, including Local Councils, are committed to litter reduction. Every March many Local Councils support Clean Up Australia Day. In 2003, approximately 600 000 volunteers cleaned up more than 6 000 sites across Australia. Nationally over 6 300 tonnes of rubbish was collected. The most common litter items collected were cigarette butts, various plastics, soft drink containers and glass pieces and bottles.</p> <p>While Clean Up Australia Day and similar events are important, prevention is better than cure. Teaching students to dispose of litter correctly and reduce, reuse and recycle where possible, provides a long-term solution to litter problems.</p>
Activity: 'Litter Horoscopes' Tip <i>You may have to provide a couple of examples of actual horoscopes as a model for the students writing.</i>	<p>Ask students:</p> <ol style="list-style-type: none">1. What is litter?2. List the impacts that litter has on our environment, locally and nationally. <p>You may wish to consider:</p> <ul style="list-style-type: none">• Makes environments, such as schoolyards and beaches look untidy.• Can be dangerous to humans• Can hurt animals through entanglement or if it is swallowed• Can pollute environments such as creeks and rivers <p>The students are to choose one litter item and write a future prediction for that item. The prediction should recognise the impact on the environment of particular materials and mention a way to prevent the item being littered in the first place. For example:</p> <p><i>Plastic Bag: You sometimes feel you are being blown from one place to another and can never settle down. In the last few weeks you have been in a creek and on the side of the road. Don't give up someone will soon come along and rescue you and you will spend a happy life as a home for a pair of old gardening boots.</i></p>

Unwrapping Packaging

<p>Topic: Topic Focus:</p>	<p>Waste Minimisation What are the various functions of packaging?</p>
<p>Grades:</p>	<p>6 – 7</p>
<p>Resources Required:</p>	<ul style="list-style-type: none"> • Worksheet: ‘Unwrapping Packaging’ with comparable items or • Actual Comparable items
<p>Background:</p> <p>Tip <i>It is always better to use concrete materials rather than illustrations, where applicable, as they enhance the students’ understanding.</i></p>	<p>There is no doubt that the amount of packaging associated with foods and other goods has contributed to the increasing volumes of waste produced in Australia.</p> <p>However not all packaging is bad, in fact much of it helps to reduce waste by preserving and protecting products. On the other hand some items are over packaged with many layers of decorative or non functional wrapping.</p> <p>The functions of packaging include:</p> <ul style="list-style-type: none"> • To contain the product. For example: lollies and baked beans • To provide information. For example: ingredients, recipe ideas and dietary information • Convenience. For example: single serve sauces • Displays the product. For example: a toy or shirt in a clear plastic cover • Health. For example: Toothbrush • Protects the product. For example: cardboard wrapping around light globes or eggs • Security. For example: batteries <p>Effective waste minimisation requires that people are aware of the waste hierarchy and can select products, wherever possible, that reduce waste.</p> <p>This includes:</p> <ul style="list-style-type: none"> • Selecting products that have less packaging • Selecting products that have recyclable packaging • Buying products in larger containers • Avoiding disposable items and products • Selecting products that have reusable containers
<p>Activity: ‘Unwrapping Packaging’</p>	<p>Use a commonly purchased shopping item or items to initiate a discussion on the role of packaging. Products such as chip packets, tuna lunch packs and poppers provide a good starting point.</p> <p>Discuss the following issues with the students:</p> <ul style="list-style-type: none"> • Why is packaging necessary for this item? (consider the functions outlined in the Background Information) • Is the product over packaged? • Could any of the packaging be reused or recycled? <p>Using the Activity Sheet, ‘Unwrapping Packaging’, the students are to design the packaging of a new item. You may choose to provide a list of options to narrow their selection. In designing the new packaging, ask the students to include:</p> <ul style="list-style-type: none"> • A brief description outlining the function. • A justification of their choice

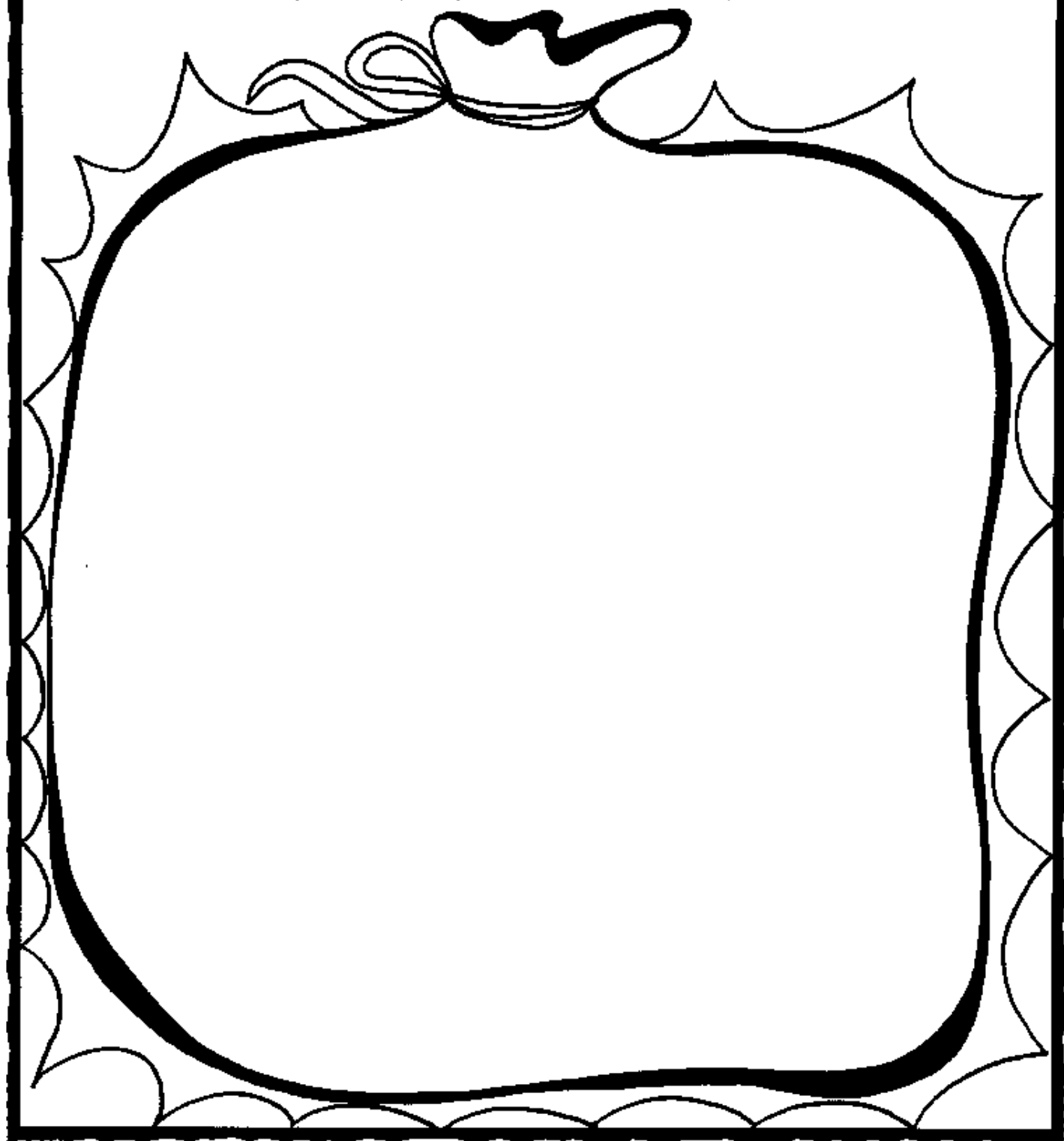
UNWRAPPING PACKAGING



Choose an item and design a new package for it.

Remember to consider the function of the packaging, whether it can be reduced, reused or recycled and if it effectively gets your ideas across.

Draw your design in the space provided and label its components.



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