Tip the Balance on waste!

Facilitator's Guide

A Waste Reduction programme designed for senior primary students.

Can you reduce the amount of rubbish you generate?

Developed by Environment Canterbury on behalf of the
Canterbury Waste Joint Committee

Activities

Student Book Key

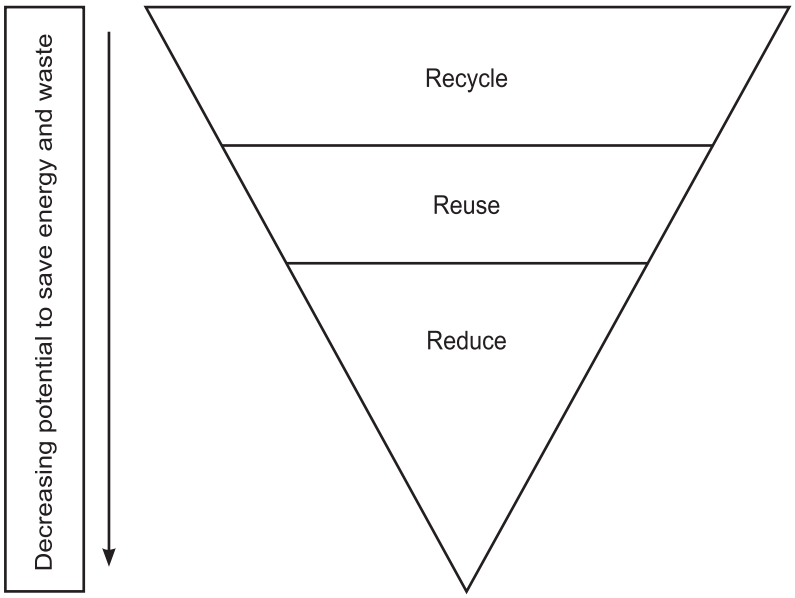
T	This activity requires teacher explanation and is part of a lesson plan.
S	This activity can be completed by the student independently.

Written by Debbie Eddington, Environment Canterbury.

Introduction

"There is a huge range of activities taking place in New Zealand to lower the amount of waste going into landfills,' e.g. community groups advocating 'zero waste', school students composting and recycling paper, local governments involved in waste recovery and recycling initiatives."

Most of these initiatives however, largely focus on Recycling.



"The government has identified a need to REDUCE waste as a cornerstone of New Zealand's commitment to sustainable development."

Advertising fuels the desire for the symbolic meanings that people consume. It continuously persuades people to buy more and more.

Although many existing initiatives are helpful, it is vital to peel back the layers of problems like waste to address their underlying causes, and not just deal with their symptoms. For example, are people simply being socialised to dispose of their waste without enabling them to work out ways to prevent it in the first place?

- (See Change: Learning and Education for Sustainability – Parliamentary Commissioner for the Environment, Jan 2004)

We live in a consumer society.

The purpose of this resource is to raise awareness of waste and the impact it has on our natural resources and environment. This not only involves its disposal but also focuses on the waste produced from its conception to the final product. Finally, and most importantly, it invites educators, students, and their communities to investigate how their choices can and should play an integral part in reducing waste.

The activities highlight the waste problem, offer suggestions and, through the inquiry learning process, invite all involved to think of positive actions that can be implemented to reduce waste.

The lesson plans are intended as part of the 'immersion' or 'acquiring knowledge' stage of an inquiry unit. The inquiry learning template offers examples of 'Big Questions' ideas for individual students to conduct their own investigation.

Waste - Curriculum Links & Resources

CURRICULUM LINKS:

Vision: Actively involved – contributes to the well-being of New Zealand's environment.

Principles: Future focus – this unit encourages students to look to the future by exploring significant future-focused issues such as sustainability.

Values:

- *ecological sustainability*, which includes care for the environment.
- *community and participation*, for the common good.
- *integrity*, which involves being honest, responsible, and accountable and acting ethically.

Key Competencies: Thinking, using language, symbols and texts, participating and contributing.

Learning Areas: English, Science, Mathematics and Statistics, Social Sciences.

References to 'old' curriculum documents:

Science

The Material World
Level 3:4 Level 4:4

Planet Earth and Beyond
Level 3:4 Level 4:4

Social Studies

Culture and Heritage
Level 4

Place and Environment
Level 3 & 4

Resources and Economic Activities
Level 3

English

Viewing and Presenting
Level 3 & 4

Speaking
Level 4

Reading
Level 3 & 4

Maths

Number – solve practical problems involving whole numbers and decimals. Budgeting for class party.
Measurement – surface area.

Technology

Technology in the New Zealand Curriculum – Level 3 & 4

- Recycling and Waste Disposal – pg 49
- A Festive Table – pg 54
- School lunches – pg 52
- Food Containers and Packaging – pg 59

Curriculum Resources:

Making Better Sense of the Material World – Paper pg 91.

Making Better Sense of Planet Earth and Beyond – pg 55 “All Roads Lead Back to the Soil”.

Building Science Concepts series:

Book 13 – Aluminum **Book 60** – Rubbish – How to Deal With It
Book 61 – Recycling – New Uses for Rubbish.

Websites:

- http://www.reducerubbish.govt.nz/text/index.html
- http://www.sustainability.govt.nz/
- http://www.kidsfootprint.org
- http://english.unitecnology.ac.nz
- http://www.ecan.govt.nz
- http://www.wastewise.org.nz
- http://www.worldwatch.org/node/1497

Resources:

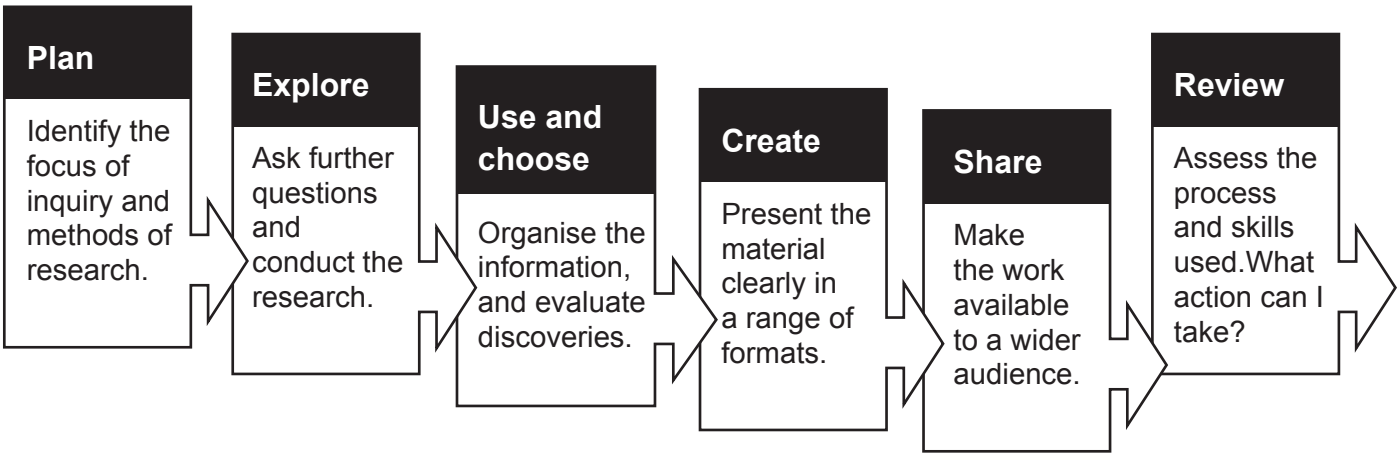
- Ebox – Waste not – Want not – Environment Canterbury
- Recycle, Reduce, Reuse, Rethink – Macmillan World Library series – by Kate Walker ISBN 978–1- 4202-6102-8
- Adventures in Thinking – Joan Dalton – ISBN 0 17 006555 3
- Kids Page – Environment Canterbury website.

School Journals:

Aku Taonga – My Treasures	1997 Part SL Number 1
The Day of the Enormous Bin	1987 Part 3 Number 2
Filling the Bin	1987 Part 1 Number 3
Is that a Soft Drink Bottle You’re Wearing	1999 Part 4 Number 1
Keep It Clean	1991 Part 4 Number 2
Lions in the Street	1989 Part 1 Number 1
A Load of Junk	1998 Part 1 Number 4
A Load of Rubbish	1996 Part 1 Number 1
Mr Trask’s Trash	1998 Part 4 Number 2
Picking Up Rubbish	1996 Part 1 Number 1
The Place of the Gulls	1991 Part 1 Number 1
The Power of Rubbish	1998 Part CN Number 3
Space Junk	1991 Part 2 Number 2
A Special Sort of Person	1989 Part 2 Number 2

'The Big Picture' - An Inquiry Learning Template

T S



Research Ideas

These are suggestions only - be creative, think of your own research ideas!!

- Life Cycle of soft drink bottle.
- Life Cycle of cling wrap.
- Alternatives to… cling wrap.
- Visit the supermarket or another retail outlet – observe/compare similar products and the packaging used.
- Government initiatives/ideas for reducing waste.
- How people can reduce their waste.
- Investigate food marketing. Why is there so much packaging? Look at advertising techniques and how these are used in packaging to convince consumers they need the product.

Big Questions

- If cling wrap was banned in New Zealand what alternatives are there and would people use them?
- What is the environmental impact of New Zealand importing fruit from America/Australia?
- How much rubbish does the average household (approx. 4 people) produce and what does it consist of?
- How can I reduce the amount of waste I produce?
- What is 'carbon footprint'? What does it have to do with me?
- What happens to my old/broken TV, refrigerator or microwave? Is this the same in every region of New Zealand?
- What products can be recycled in my home town and is it cost effective (worth doing)?

Waste - Introductory Lessons

Topic: Waste – Introductory lessons		
Lesson Outcome: Students will have an understanding of what contributes to the school's daily rubbish output and how much of this is destined for the landfill.		
Equipment/Resources: Reducing Waste Bingo pg 1 in student book, waste from landfill bin(s), Rubbish, rubbish, rubbish… pg 2 student book.		
Activity Description	**Key Questions**	**Actions/Outcomes**
Using 'Lunchbox Bingo' pg 2 student book. Students move around each other asking questions from the sheet. For example do you use plastic wrap around your sandwiches? If answer is 'yes' the student who said yes signs appropriate space on the sheet. When the sheets are completed give the students an opportunity to share what they have learnt about each other.	Students ask each other questions from the Bingo sheet. How many use plastic wrap? Does anyone keep their sandwich in a reusable container with no wrap? Who had imported fruit in their lunch? etc.	Encourage students to get as many different signatures as they can on the sheet. Ask students to offer new/other criteria with a waste reduction theme to include on this sheet. **Ensure students know this is not a judgment of how or what they bring to school in their lunchboxes. It is just to get a feel for what others do in their class and perhaps get some ideas for their own lunches!**
Brainstorm all the sorts of rubbish created at this school. Students record on Rubbish, rubbish, rubbish pg 2 of student book.	Who produces what rubbish at this school? Whose job is it to dispose of it? Do you think we could reduce the amount of rubbish we create at school? How? What do we do with all our rubbish at school?	Classification of rubbish – use the 5Rs. Review school waste disposal systems. Suggest improvements students as individuals could make to this.
Collect and sort waste from one landfill bin – either class or school bin. Categorise according to agreed criteria, e.g. • Not needed – could be replaced with something that doesn't go to landfill • Recyclable • Compostable • Reusable • Surprising that it's there at all • Rubbish for landfill OR make your own criteria	What material creates the largest percentage of our school waste? Is it recyclable? Could we reduce the amount produced? If so, how? Would our rubbish at home look the same? What other things would you expect to see? Do students think it would be possible to reduce the rubbish they produce at home? Complete this task with bins from another location (within school OR wider community).	Share findings with other classes, school assembly.

Lesson Two – Waste Monster		
Create a life-size monster shape by drawing around a student lying on sheets of recycled paper (old calendars taped together). Create a class/group monster using waste recovered from previous activities. Sort waste as it is attached to monster into potentially fixable waste (can be reduced or recycled) and hard to deal with stuff (e.g. ink cartridges, treated timber, plastic bags, food wrap, etc.). Gather class's throw away waste from their lunchboxes for a week. Weigh it, pack away in plastic bucket with lid (so it doesn't smell). Compare by doing the same activity at the end of the unit. Evaluate the success of unit/ behavioural change.	Will the 'hard to deal with waste' fit into a small area of the monster e.g. its head? Analyse the waste, again sorting into categories. How much is destined for landfill? Could this be reduced or eliminated? How?	This activity could be completed in groups, creating a family of 'Waste Monsters' made from school/community rubbish to illustrate how 'monstrous' the problem is. Display the monsters around the school to make others aware of the problem.

Additional Ideas:

- Students and teachers implement a 'reduce the waste to landfill' campaign at school, encouraging all students to bring less packaged foods to school.
- Design a lunchbox with appeal to nominated market – i.e. juniors, seniors and secondary school students, businessman, etc. Must be able to hold foods without using plastic wrap – REDUCE!
- No Lunchbox Waste Challenge – set up a challenge for a week with students. Produce no waste in your lunchbox. How much can we reduce our waste during the course of this unit?
- Reduce Waste Ideas Box: make a suggestion box with reducing waste ideas in it. Draw one out each day and try to practise it. For example, reuse bread bags for sandwiches or to buy fruit, in supermarkets – don't forget to block out the bar code first though or you will get charged for the bread as well as the fruit!
- If your school does not already have them, build compost bins or worm farms.
- Clean up a local public area (reserve, domain, gardens, waterway, etc.) – analyse the rubbish found and find out who is responsible for it.

What is a 'waste stream?

A waste stream is the total flow of solid waste from homes, businesses, institutions and manufacturing plants that is recycled, burned or disposed of in landfills. **This includes any waste produced during production, packaging and the product itself.**

A good example of waste reduction is reducing unnecessary packaging from manufactured products and produce. If this excess packaging was never produced in the first place, no one would have to be concerned with the cost and effort of collecting the excess packaging, separating it for recycling, breaking it down, transporting it to manufacturers, and then integrating the recycled materials back into the manufacturing process.

Purpose: This activity invites the students to investigate the waste stream a product or service generates throughout its life cycle – from the raw product to the store shelf or consumer.		
Resources: Plus Minus Interesting Blackline Master, photocopy of 'Facts about Paper', website www.worldwatch.org/node/1497 for further research information. CD ROM or Environment Canterbury website Tip the Balance, Aluminium Can Life Cycle cut and paste activity – Student Book.		
Lesson Sequence	**Key Questions/Discussion**	**Actions/Outcomes**
Record on whiteboard how and where society uses paper – books, packaging, etc. Photocopy the 'Facts about Paper' information below. Distribute one per three students. Students article and complete Plus Minus Interesting (Blackline Master).	Where and when do you use paper in your lives? What did humans use before we had paper? What would life be like without paper? Is it necessary to use as much paper as we do? Can we reduce it? Discuss information provided. What did students gather from PMI?	Using the web address above, students can further research paper information and record simple actions they can take to reduce paper use. Students can also research other environmental issues using the same website.
Choose a product which uses paper (or similar) in its packaging, e.g. soap. Some are individually wrapped then packaged again in packs of four. Discuss how it is packaged.	Why is this product packaged in this way? Has this product always been packaged in this way? Are all similar products packaged in the same way? Is all the packaging necessary? Is the packaging needed at all?	Students will realise that not all packaging is needed – in fact sometimes it is not needed at all. As part of their marketing strategy, companies package products to make them more appealing to the consumer. **Packaging makes up around 12% of household rubbish in New Zealand.**

Lesson Sequence	Key Questions/ Discussion	Actions/Outcomes
Waste Stream: View aluminium can life cycle on data projector using Tip the Balance CD-Rom or Environment Canterbury's Education website. Students complete aluminium can life cycle activity in student workbook. (pg 10). Check answers against teacher mastercopy. List on whiteboard all forms of energy used throughout life cycle of can. Refer to lunch box choices on Tip the Balance. Compare locally grown fruit to imported produce. Using the same product as in previous activity (soap), encourage students to consider the energy used during the production process.	Discuss energy used to produce the aluminium can. For example, diesel used by mining machinery at bauxite mine, diesel used by trucks/ trains, etc. transporting bauxite to refinery. Why do we import these goods when we can produce them in New Zealand? What is the more sustainable food choice environmentally? Why? Research and record this product's life cycle using the aluminium can as an example.	Students understand some of the reasons for importing goods, e.g. seasonal fruit, unable to grow in NZ because of climate, etc. Students create a list of other products that are both locally grown or manufactured and imported, e.g. oranges, apples, clothing, timber, fuel, etc.

Follow Up Activity – Poem If… I would… And I wouldn't (pg 4 Student Book)

Read through example poems in student book.
Students generate their own ideas on work sheet (student book) or Draft writing book.
Publish and share with other classes or in newsletter for wider school community.

Further Actions – Extension Activities:

- Create a list of products where the packaging could be seen as excessive. Record on a big sheet of paper using coloured pens. Students add to list during the course of the unit, as they become more aware of the waste created by packaging.
- Recycle your junk mail, and tell vendors to stop sending it.
- Create your own list of actions to help reduce the amount of waste you create.
- See if you can go a week without printing out any new e-mails. Try instead to archive your emails and other information electronically, using a computer-based filing system.

Photo copy Master - Facts about Paper

For most of its history, paper existed as a precious and rare commodity. Today, it covers the planet. From the contents of our in-boxes to the currency in our wallets to the containers for our frozen dinners, paper is never far from reach. Global paper use increased more than six-fold over the latter half of the 20th century, and has doubled since the mid-1970s.

About 93 percent of today's paper comes from trees, and paper production is responsible for about a fifth of the total wood harvest worldwide. A sheet of writing paper might contain fibres from hundreds of different trees that have collectively travelled thousands of kilometers from forest to consumer.

Although invented as a tool to communicate, about half the paper in today's consumer society serves another purpose - packaging. This and other rapidly discarded paper now represents a big chunk of the modern waste stream, accounting for roughly 40 percent of the municipal solid waste burden in many industrial countries.

Yoghurt Pottles Galore

SURFACE AREA DEMONSTRATION:

- Cut a 1kg yoghurt pottle open so that it will lie flat on a surface.
- Collect small yoghurt pottles from bin rubbish and rinse out.
- Jigsaw pieces of small pottles to cover large pottle.
- **OR:** Cut large container and lay over grid paper to see how many squares it covers. Do the same with small containers to see how many small pottles it will take to cover the same surface area as the large pottle.

This would have more impact if the initial demonstration was started by the teacher, then in groups, students continue it themselves. How many little containers did it take to cover the surface area of the bigger container – how much less yoghurt? This will require collecting lots of yoghurt containers!

Outcome – students will see that by purchasing larger containers and spooning the yoghurt into smaller reusable containers to take it to school they are reducing rubbish going to the landfill and saving money!

Brainstorm products packaged in 'lunchbox' sized or 'convenient' packaging… where this same process could be applied, e.g. prunes, raisins, snack biscuits, potato crisps, etc. etc. etc.

Encourage students to use the same process as above to investigate and compare the surface area of waste produced by the individual lunch sized packets and the bulk packet.

The student's work could be glued to the backs of old (large) calendars or recycled paper and used as a 'visual' rubbish display.

Extension Activity:
Do the maths – how much money would you save if you bought in bulk and put food in a reusable container in lunch size servings?

Discussion:

What implications do any of these displays have for the waste stream?
For example:

- Energy used to produce the many smaller containers/packaging?
- Paper labeling on the products – lots of smaller labels or one big one?
- Transportation – how much more space do the smaller containers take?
- Landfill space that the end piece of rubbish will take up?

Waste and the Media

This lesson works best when linked to 'Waste and the Media' page 3 Student Book

Topic: Waste and the Media

Lesson Outcome: Students will recognise ways in which the media target young people in their advertising of 'cool' food to have in their lunchboxes.

Curriculum Links: English – Listening, Reading and Viewing

Equipment/Resources: http://english.unitecnology.ac.nz/resources/units/advertisements/home.html
http://english.unitecnology.ac.nz/resources/units/persuading/home.html
Adventures in Thinking – Joan Dalton
Magazines, junk mail, newspapers, pre-recorded video of lunch food TV advertisements.

Activity Description	Key Questions	Sequence
Discuss advertising techniques that can be used to sell food products. *(Poster may need to be made for students to refer to outlining the techniques used in advertising – refer to first web reference under 'Equipment & Resources'.)* Brainstorm food advertisements and discuss what technique is used to sell the product.	What product is this advertising? Who is the intended audience, i.e. pre-schooler, elderly, businessman? What advertising technique has been used to market the product, e.g. bandwagon, repetition, urgency, bargain and free, etc.? ('Adventures in Thinking' – pg173 or web references.) How is the product promoted? What makes you want to buy it?	Students collect a variety of food advertisements from newspapers, magazines, junk mail, etc. Sort ads according to technique used. Make collages of adverts using each technique for students to refer to during the unit.
Students choose one advertisement to focus on. OR: Look at junk mail and record its waste stream. **Extra:** Visit a supermarket – observe/research use of packaging with students noting where they think the packaging could be reduced.	Does this product use a lot of packaging? Is this product offered in bulk, e.g.1kg pottle of yoghurt versus six-pack of little pottles? Could the company have used a more environmentally sustainable means of packaging?	Discuss considerations when purchasing: - packaging - expense - convenience - reusable containers - throwaway packaging - everyone else has them in their lunchbox – peer pressure - healthy versus junk - how did it get to the supermarket shelf – what is the waste stream involved? What waste was produced in getting it to the shelf?

Evaluation/Homework Task:

- Complete student book activity sheet – either for homework or as in class activity.
- Students highlight products their family use on their homework sheet – research/suggest alternative purchases that would create less waste – record these on homework sheet or in notes section at the back of the student book.
- OK, so what? What can we change about the choices we make as a family at the supermarket?

'Let's Have a Party'

Purpose:

Students will use knowledge gained from this unit to plan, prepare, and conduct a class party/ celebration in order to share their knowledge, inviting guests from home and the wider community (e.g. parents/caregivers, local dignitaries, etc.).

Activities	Key Question	Evaluation
The Class Party Decision time – class to discuss and decide on an appropriate celebration.	What type of celebration do we want to have to culminate this unit? What are our options? Formal dinner, shared lunch, afternoon tea with invited guests, recycled fashion parade, etc.	Do the students have a variety of ideas? Do these ideas stem from a 'reduction' theme?
Waste analysis – Students think of parties/dinners they have attended – what waste is produced at these celebrations? Brainstorm – record on whiteboard or paper to refer to later.	What waste could this activity generate? How can we reduce it?	Don't use plastic cling film. Can students suggest ways to reduce waste produced?
Party table – before and after knowledge gained from unit.	What would the two tables look like? What would be the same about them? What would be different?	Venn diagram comparison – Blackline Master.
Planning **NB: Consider how many guests the class is able to cater for. Two guests per student = 60 guests for an average sized class!**	Things to consider: Menu, invitations, guest speakers/ toastmasters, advertising/promotion, donations, dishes, clean up.	See planning sheet – student book pg 8
Menu - home baking, fruit platters to reduce packaging.	Including healthy food options but most of all how are you going to transport/package it to get to school?	Are contributions brought in reusable containers?
Design an information pamphlet for guests to take home with them on the 'reduction' theme.	How can I best convey the 'reduction' message to my home environment? What could we do at home to contribute to waste reduction – include these ideas in the pamphlet.	Record ideas in the evaluation box of 'Group Planning Sheet' in student book.
Eco-friendly gifts - wine glass rings – made from recycled/able products, e.g. bent paper clips.	Can you donate your time? For example, walking guest's dog, babysitting, gardening, lawn mowing, etc. Design a drinking glass identification.	The end product!
Guest speakers Select students to explain the learning process. How they reduced waste.	Public speaking – who is your intended audience? What is the key message you want to convey in your toast/speech/presentation?	The Burger Model – planning/ assessment sheet.

Evaluation:

PRIZE GIVING: This could be incorporated into the celebration (guest vote) OR decided and awarded later.

- Points given for best presented table that produces least waste.
- Best power point/speech conveying the 'reduce waste' message of unit.
- Best email invite.
- Best pamphlet design promoting 'reduce waste' message, etc.

REWARDS: (suggestions also from students: must not produce any waste!) e.g. free time, time out with a friend, play a computer game, play a board game, a class game.

Concept Map - Answers

The Life Cycle of an Aluminium Can - Answers

Facilitator's Master

1. Bauxite mine – 10 times the size of Christchurch (a very big hole in the ground!) Weipa, Cape York, Queensland.
2. Bauxite travels 3000km by boat to Gladstone refinery, Queensland.
3. Refinery where ore is washed out of bauxite, Gladstone, Queensland.
4. Ore on boat 2200km from Gladstone to Melbourne.
5. Ore smeltered (heated and melted) into aluminium blocks. Smelter Melbourne.
6. Aluminium blocks shipped 2600km to Auckland.
7. Made into aluminium sheets, then cans.
8. Empty cans trucked to plant for filling – Auckland.
9. Drinks factory – Auckland.
10. Filled cans sent to Christchurch by truck and inter-island ferry to a warehouse/ distribution centre.
11. Distribution centre Christchurch.
12. Delivered by truck to retail outlets (shops, dairies) in Canterbury.
13. Corner dairy/supermarket – Canterbury.
14. Consumed by someone then:

15A. Recycling Plant
Shipped back to smelter in Melbourne for melting down – then cycle begins again

OR: 15B. Rubbish Bin Landfill - Canterbury

Plus, Minus, Interesting

Read the article provided and fill in the spaces below:

PLUS

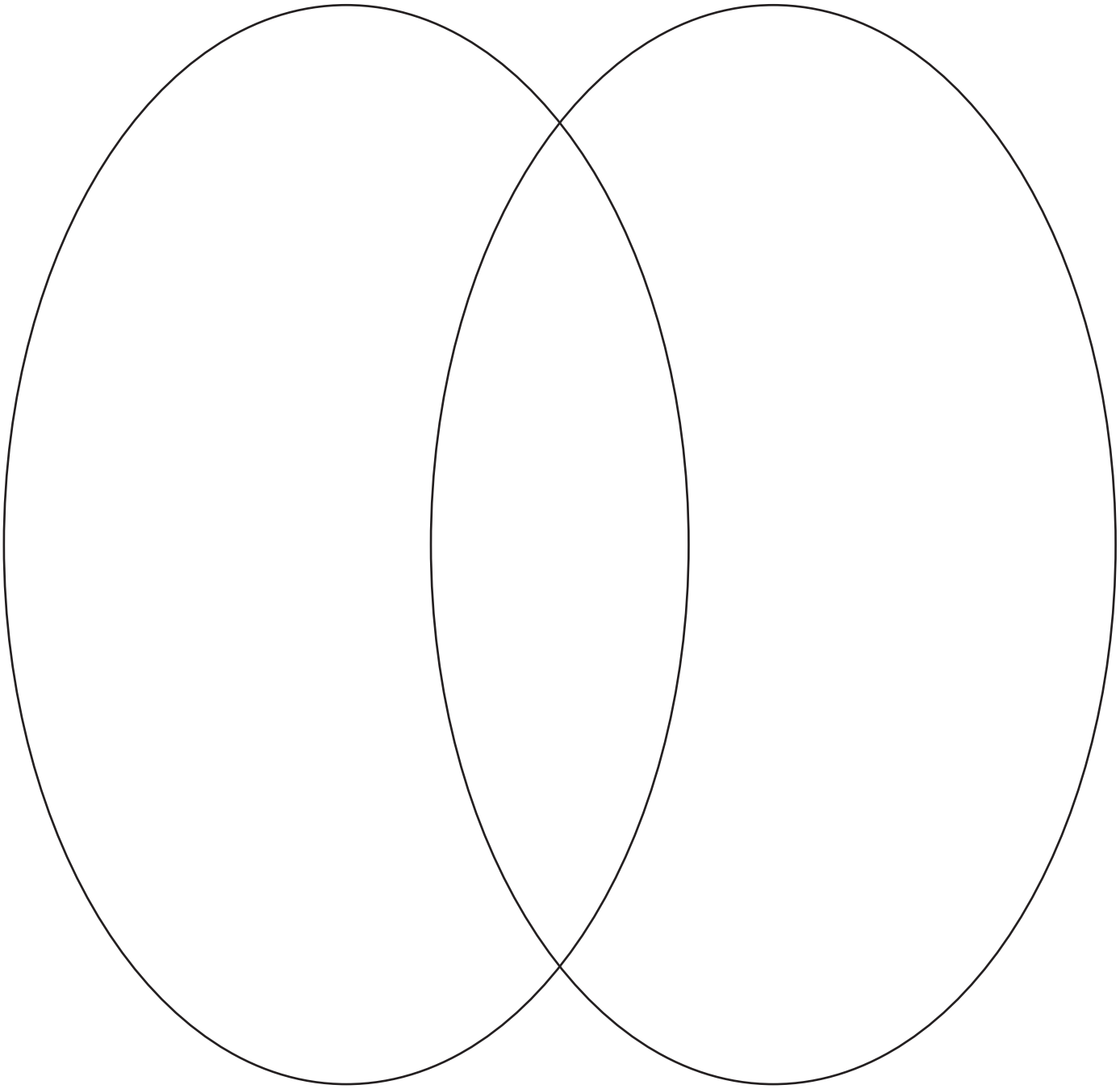
MINUS

INTERESTING

Our Party Table

Festive Table
Before Waste
Reduction Unit

Festive Table
After Waste
Reduction Unit



You are a Poet and You Know it!

If I... I would... And I wouldn't...

Here are some suggested starter lines for a poem. Do the research and write a poem using one of the 'If I' examples … or create your own.

**IF I

… Stopped using aluminium cans
... Drank water from the fountain
... Grew my own vegetables

… Stopped using plastic cling wrap
… Used green shopping bags
… Had a compost/worm farm

**I WOULD

(Stopped using aluminium cans)
Use a reusable bottle
Have a drink out of a cup
Reduce rubbish by 365 cans a year
Have a drink out of the water fountain
Use a soda stream
Be healthier

(Stopped using plastic cling wrap)
Use reusable containers
Wrap my food in lunch paper
Eat on the run

**AND I WOULDN'T

(Stopped using aluminum cans)
Produce so much waste
Have to recycle them
Have to spend so much money on buying the drink in the first place
Be using oil, which is a non-renewable resource and is running out

(Stopped using plastic cling wrap)
Have to worry about my dog accidentally swallowing some
Have to find a place to dispose of it

NOW YOU HAVE A GO ON PAGE 16!
(Page 5 in Student Book)

If I... I Would... And I Wouldn't

1. IF I... (choose an example from page 15 - pg 5 in Student Book - OR start your own)

_____

2. I WOULD...

- _____
- _____
- _____
- _____

3. AND I WOULDN'T...

- _____
- _____
- _____
- _____

Try others in your writing book.

Publish your favourite poem and display around school, home or community notice boards (supermarkets, libraries, etc.)

Glossary

Biodegradable	Capable of decomposing rapidly by micro organisms under natural conditions. Most organic materials, such as food scraps and paper are biodegradable.
Carbon Footprint	A Carbon Footprint is a measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide.
Compost	Compost enables us to convert food (food scraps), garden waste (GREEN waste) and dried leaves, sawdust, hay, paper, etc. (BROWN waste) into something which can be used again.
Food Miles	Food miles refer to how much a product has had to travel to get to its final destination.
Greenhouse Gases	Greenhouse gases (GHGs) are trace gases that control energy flows in the Earth's atmosphere by absorbing infra-red radiation.
Imported Goods	Imported goods are anything that comes from another country other than where you live.
Landfill (residual management – 5Rs)	Landfills are essentially a hole in the ground but especially designed and built. They prevent contamination of the land and other natural resources like water. The design takes into account the geology of the land and proximity to a range of different natural resources. The base is lined so contamination of the land is minimal and they are covered to prevent smell, the spread of disease and unwanted animals like rodents living in the area.
Recover	Can the materials and/or its energy be used again but in a different way?
Recycle	Recycling is the process of reclaiming used products and objects from businesses and households and remaking them into new or sometimes different products.
Reduce	Reduce the amount of packaging used. For those products that must be packaged, consider methods of reducing the amount of material used in the packaging. It is the first step in the waste management strategy.
Refuse Station	Sites at which the public can deposit waste for composting, recycling or reuse (also known as transfer stations).
Reuse	The idea of reusing is to use something again in its original form for either the same purpose or a similar one. It is closely linked with reduce as it lessens the amount of waste that ends up in the landfill. It is the second step in the waste management strategy.
The 5Rs	The nationally and internationally recognised system for managing waste is the 'waste management hierarchy' or the 5Rs – Reduce, Reuse, Recycle, Recover and Residual Management (landfill).
Vermicomposting (worm farming)	The process of using earthworms to convert organic waste into nutrient-rich fertiliser. An earthworm's waste (also know as castings) provides beneficial nutrients for compost and soil, which encourages plant growth. Also called "vermiculture".
Waste stream	The total flow of solid waste from homes, businesses, institutions and manufacturing plants that is recycled, burned or disposed of in landfills. This includes any waste produced during production, packaging and the product itself.
Wastewise	Like its name, Wastewise means to be wise about waste. This includes looking at where the product is from, it's packaging, and how any remains are disposed of.