



Keep New Zealand Beautiful

Kiki Kiwi & Friends 'Litter Less'

THEME 1 - DEFINING

Full Unit Of Work
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PROUDLY SUPPORTED BY:





THEME 1: DEFINING

The 'defining' theme will lead students into understanding how litter moves and breaks down, in order to build an understanding of the litter issue in the local, national and global contexts. It will enable students to define litter and littering through a combination of individual work, group work and whole-class collaboration.

In this theme:

INQUIRY QUESTION 1: What is litter?

- Lesson 1a: Define litter and littering
- Lesson 1b: Where is litter found and where does it come from?
- Lesson 2: Litter hazards and impacts

INQUIRY QUESTION 2: How and why do people litter?

- Lesson 3: Types of 'litterbugs'

Theme 1 Student Learning Intentions

Students will:

- develop their understandings of litter in natural and built environments by completing sensory activities
- discuss where litter is commonly found, where it has come from and how it might end up in different places
- construct individual definitions of litter/littering
- identify the social, environmental and economic impacts and hazards of litter/littering
- examine the positive and negative effects of litter/littering
- select which impacts they believe to be the most important to address, and elaborate on their point of view
- identify the different ways in which people litter
- analyse the ways in which people litter and state their personal beliefs on littering, based on questions posed by the teacher
- draw their own conclusions on littering behaviour based on their developing personal beliefs.



THEME: Defining

INQUIRY QUESTION 1: What is litter?

Lesson 1a: Define litter and littering

Lesson 1b: Where is litter found and where does it come from?

Student Learning Intentions

- Understand and define the terms 'litter' and 'littering'
- Recognise where litter comes from
- Identify why people litter

Resources

- Litter in the real world cards
- Common litter items such as chip packets, lunch bags, plastic bottles etc. (optional)
- Littering videos on the internet (these are optional and can be found by searching for 'littering' or 'rubbish in creeks' etc.)
- Interactive whiteboard (IWB)
- Internet access



Teacher Background Information

Lesson 1a: Defining litter and littering

Lesson 1b: Where litter is found and where it comes from?

There are many definitions of litter and littering. A simple internet search will give you a number of different definitions; some more complex than others. Some definitions list certain items as litter (e.g. glass, paper, plastic), while others use technical/legal language to define littering (e.g. deposits rubbish without authorisation or a permit). For the purpose of this activity, litter is simply any item left lying in an open or public space. Littering is the verb, and is the act of dropping litter.

Litter is found everywhere; from shopping centre car parks to country roadsides. It can end up there in a number of direct and indirect ways. These will be elaborated on in subsequent lessons.

There is no absolute definition of litter and littering. This activity allows students to showcase their understanding of litter by creating their own definition, after considering the points covered in the lesson. You may wish to revisit the definition at the end of the unit to see if students would like to make any amendments.



Suggested Lesson Organisation

Lesson 1a: Define litter and littering

Lesson 1b: Where is litter found and where does it come from?

1. Before starting the lesson:
 - Prepare your classroom prior to the lesson by 'littering' it with common litter items (e.g. chip packets, takeaway food packaging, lunch bags etc.).
 - Locate a short video on the internet showing littering or a littered scene (try searching 'littering' or 'rubbish in creeks' etc.).
2. Begin the learning by discussing litter. Prompt this conversation by asking the following questions which consider all five senses (I see, I feel, I hear, I smell, I touch):
 - What can you see?
 - What is happening or what has happened?
 - How does this make you feel? Do you think it is okay?
 - Where has this happened or where could this happen?
 - Why has this happened?

Students can respond to these questions as a whole class or in small groups.

3. Introduce the unit of work to the students. Ask the students for a definition of litter and to give an example. Then discuss why the class might be learning about litter, whether they think it is important and why.
4. Explain that litter can be found in a number of different places. Form small groups and provide each with a 'Litter in the real world' card (with the scenario removed or covered) to prompt thinking about where litter is found, and where it might have come from.

Key questions to discuss could include:

- What can you see?
 - Have you ever seen litter in the place in the picture?
 - Where have all these items come from?
 - How did they get there?
 - Why is the litter there?
 - Can you think of other places where you have seen litter?
 - Is there litter here at school? (Consider taking the students outside briefly.)
5. Allow the groups to report back to the class and record key words and phrases on the board. This could include the environment featured in the picture, any specific items they have identified, how they might have ended up there etc.



6. Review some of the key words/phrases written on the board. Explain that they are all important factors when considering litter and littering.
7. In the same small groups, ask the students to use some of the ideas from the whiteboard to form their own definition of litter and littering. For example, 'Litter is an item that is dropped in any environment and not in a bin' or 'Littering is when someone drops something in the environment without caring'. Using the students' definitions as a starting point, work together as a class to form an agreed definition of litter and littering.

Optional activities

- Students investigate the question 'Why is there a litter problem?' Students could focus on how packaging has evolved over the years (e.g. the evolution of plastic packaging) and how changes in packaging have contributed to the litter problem.
- Students to interview an older relative (e.g. grandparent) to understand how items were packaged in the past.
- Students to look at advertising of food items. Are the advertised items packaged? Does packaging help to sell products? Consider colour, characters, word choices etc.
- Students to draw a picture of a place where they have seen litter or littering.
- Ask the students to select one image and devise a 'litter story' to explain how the litter ended up in the place.
- Students to write a description piece or profile on a litter item using the five senses, and covering points such as: what does it look like, what does it feel like, what does it smell like?
- Recap/reflection
- What key words can we use to create a definition of litter/littering?



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THEME: Defining

INQUIRY QUESTION 1: What is litter?

Lesson 2: Litter hazards and impacts

Student Learning Intentions

- Identify the hazards and impacts of littering
- Infer the environmental, social and economic impacts of littering
- Determine whether littering impacts are positive or negative

Resources

- Litter in the real world cards
- Litter scenario impacts and hazards chart
- Impacts of littering sheet
- Interactive whiteboard (IWB)



Teacher Background Information

Lesson 2: Litter hazards and impacts

Litter creates hazards which may impact on people, animals and the environment. A hazard is something that has the potential to harm. An impact is something that has an effect on someone or something. Hazards and impacts can generally be grouped into one of three categories:

1. Environmental (plants, animals, habitat, natural resources)
2. Social (people, and places)
3. Economic (money-related)

Environmental hazards and impacts include:

- Polluted waterways
- Litter entrapment
- Litter ingestion by animals
- Leaching toxins from litter (e.g. plastics)
- Injuries to animals caused by broken glass etc.

Social hazards and impacts include:

- Injuries to people caused by broken glass etc.
- Negative impact on aesthetics
- Inability to access facilities (e.g. swimming in polluted waterways).

Economic hazards and impacts include:

- Cost of clean-up
- Cost of litter disposal
- Loss of income to tourist locations (if affected by litter).

Each category is significant although some people may feel that certain categories are more important than others (e.g. some students might think that the cost of clean-up is more important than polluted waterways). By enabling the hazards and impacts to be ranked, an understanding of where the beliefs of the class lie can be established, and students can recognise their own values/beliefs. Depending on the individual class, the difference between hazards and impacts can be discussed, or students can complete an activity to identify a hazard and list its associated impacts.



Suggested Lesson Organisation

Lesson 2: Litter hazards and impacts

1. Recap on the previous lesson; where litter is found and where it might have come from. Explain that once litter is dropped, it can become a problem for people, animals and the environment.
2. Explain that litter can create hazards and impacts (explain the difference between the two).
3. Read out a scenario from one of the 'Litter in the real world' cards and ask the students to identify any hazards. List these on the board and then consider the flow on impacts (e.g. hazard: broken glass, impact: person could cut foot if they stood on it).
4. Explain that hazards and impacts can be grouped under three main headings: environmental, social and economic. Explain the difference between the three and place the previously listed hazards/impacts underneath one of the headings.
5. Provide each group with a 'Litter in the real world' card (either the same one as in step 3, or a different one) and a 'Litter scenario impacts and hazards' chart. Each group is to read through their scenario and list as many of the hazards and impacts on their chart as possible. There are some suggestions to guide students' thinking on the 'Impacts of littering' sheet.

Things to consider include:

- Health impacts to animals and people
 - Hazards
 - Pollution
 - Aesthetics
 - Cost of clean-up.
6. Allow the groups to report back to the class with their scenarios and ideas. Students can list additional hazards and impacts suggested by other groups on their chart, or a class copy of the 'Litter scenario impacts and hazards' can be completed on an IWB by the teacher.
 7. Ask the students if they think the hazards and impacts are positive, negative or both. Then ask if they think that some of the hazards and impacts identified are worse than others.



8. Ask the students to rank the impacts from most damaging to least damaging, more severe to less severe and so on. This can be done by:
- Having students nominate the three hazards or impacts they think are the most significant by placing sticky dots next to them. Collate this information, and share with the class; or
 - Naming a hazard or impact and allowing students to stand on a number continuum from 1-10, where 1 is not a concern and 10 is extremely concerning. 10.

Finish by discussing the students' opinions regarding certain hazards and impacts. Encourage them to provide reasons or justification for their opinions.

Optional activities

- Graph the responses from students. Which category had the most votes: social, economic, or environmental?
- Encourage students to debate why they voted as they did.

Recap/reflection

- Name some of the hazards that can be caused by litter/littering.



THEME: Defining

INQUIRY QUESTION 2: How and why do people litter?

Lesson 3: Types of 'litterbugs'

Student Learning Intentions

- Identify ways in which people litter
- Propose why people litter
- Determine whether certain littering behaviours are worse than others

Resources

- Name the litterbug activity sheet
- Name the litterbug solutions
- Laminated 'What kind of litterbug?' matching cards (colour or black and white)
- Laminator
- Litterbug animations
- Litterbug poster (optional to print for your classroom wall)



Teacher Background Information

Lesson 3: Types of 'Litterbugs'

There are various ways of littering, and the associated behaviours can generate interesting discussion. Studies on littering behaviour by Community Change (2011)¹ identified, eight certain types of littering behaviours. These eight types of littering behaviours are relevant to school-aged children (one type of litterer which relates primarily to cigarette butts has been excluded in this activity). For the purpose of this activity, the people who demonstrate the types of littering behaviour will be referred to as 'litterbugs'.

The types of litterbugs are:

1. **Dirty Disguiser**
People who bury their litter under sand, leaves etc.
2. **Foul Shooter**
People who aim for, but miss, the bin and then leave the object on the ground.
3. **Almoster**
People who put large items in the bin, but leave smaller, less obvious items behind.
4. **Clean Sweeper**
People who sweep litter off tables and leave it on the ground.
5. **Cheeky Chucker**
People who throw objects away without even trying to conceal their actions.
6. **Sneaky Creeper**
People who check that they aren't being observed, then slowly inch away from their litter.
7. **Trash Stasher**
People who push items into small places where they will not blow away (e.g. gaps in tables).
8. **Ledge Edger**
People who put items on the edges of bins, rather than littering or placing them in the bin.

¹ Names modified to fit New Zealand content. Community Change. (2011) Cartoons of Disposal Behaviour Types. Retrieved October 6, 2014, from <http://www.communitychange.com.au/insights-and-tools/changing-littering-behaviour/28-cartoons-of-disposal-behaviourtypes.html>



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Some of these littering behaviours may seem worse than others, based on the way in which the litterbug litters (quite obviously or discreetly), what they are littering (large or small items, organic items or human-made items) and how much they are littering (all their items, or only some). In reality, all these 'litterbugs' are contributing to the litter problem. It is important for students to understand this and acknowledge the cumulative effects of littering.

Community Change (2011)² also identified a number of positive littering behaviours, including:

1. **Compacting**

Stuffing materials into a full bin.

2. **Trail Blazing**

Going out of your way to find a bin.

3. **Coaching**

Prompting people to do the right thing with the disposal of their item.

4. **The Assist**

A pick-up if a foul shooter misses.

5. **Marshalling**

Coordinating a clean-up.

6. **Intervening**

Suggesting others pick up litter they have dropped.

7. **Chasing**

Running after litter that has blown away.

8. **Do-It-Yourself**

Bringing your own containers to take your litter home for appropriate disposal.

9. **Volunteering**

Cleaning up after others litter.

Students should spend some time considering strategies such as those listed above to curb negative litter behaviours in their school and community.

². Community Change. (2011) Cartoons of Disposal Behaviour Types. Retrieved October 6, 2014, from <http://www.communitychange.com.au/insights-and-tools/changing-littering-behaviour/28-cartoons-of-disposal-behaviourtypes.html>



Suggested Lesson Organisation

Lesson 3: Types of 'Litterbugs'

1. Start a classroom conversation by asking the following questions:
 - Has anyone ever littered? Students will not get into trouble for being honest.
 - Why did you litter?
 - Has anyone seen someone littering? What did they do?
 - Why do you think they did this?
 - What did you do?

Explain that people litter in many different ways. The class is going to explore the different ways in which people litter and why.

2. Arrange the students into small groups. Provide each group with a set of 'What kind of litterbug?' cards. Ask the groups to see if they can match each picture to the correct type of litterbug.
3. As a whole class, work through each image and ask the students to:
 1. Describe what is happening in the picture and why it might be happening.
 2. Indicate the name they gave to that litterbug.

Discuss any unexpected or differing responses, ensuring students provide sufficient reasoning for their choices. Use the 'Litterbug animations' to provide further clarity if required.

Provide each student with a copy of the 'Name the litterbug' activity sheet on which to record the information. This step is optional and the activity sheet can also be used as an assessment item.

4. Allocate a litterbug type to each small group. Each group must role-play the type of litterbug for the class to guess, then give a brief definition of the littering action occurring.
5. Once completed, have a class discussion, asking the following questions:
 - Why do you think each type of litterbug is littering?
 - Do you think some of the litterbugs are worse than others? Why?
 - What kind of litterbugs have you seen?
 - Do you think people are likely to litter with certain items more than others (e.g. small items or food scraps)? Why?
 - Can you think of any other types of litterbugs?



6. Ask the students to suggest some positive littering behaviours. Prompt this by encouraging them to think of ways in which the negative behaviours could be changed, or how litter could be dealt with.

Optional activities

- Students draw a comic strip of their small group role-play.
- Students give their litterbug role-play an alternate ending, showing a possible option instead of littering (e.g. they find a bin, a friend reminds them not to litter, they put litter back in their bag etc.).
- Students draw a picture of a positive littering behaviour.
- Students design posters for a particular litterbug to try and discourage people from littering. Place the posters around the school.
- Extend students' understanding by showing what happens when litter is dropped by one person or by multiple people (the cumulative effect of littering). Drop one piece of litter on the floor, then ask:
 - Does one piece of litter matter?
 - How would the school look if every student dropped litter?
- Instruct all students to drop a piece of litter, and then ask the first question again. Discuss the effect on the school and surrounding community if everyone dropped their litter.
- Students to create their own names for each of the litterbug characters.
- Students to suggest new litterbug characters and describe their action.

Recap/reflection

- Think about the many ways in which people litter and why.