

### LITTER



This activity explores the effect of rubbish on bushland fauna and flora. Students can explore the consequences of littering on the environment through video, text, internet research and discussion. There are two levels of reading material and worksheets to suit reading ability.

See the *Teachers Guide - Bushland Activities* for hands on bushland lessons dealing with weed and litter surveys.

## Biological Sciences

Year	Content Description	Elaborations	Teaching Points
Four	<p><b>Science as a Human Endeavour/Use and Influence of Science</b> Science knowledge helps people to understand the effect of their actions. <b>ACSHE062</b></p>	<ul style="list-style-type: none"> <li>Considering methods of waste management and how they can affect the environment.</li> <li>Exploring how science has contributed to a discussion about an issue such as loss of habitat for living things or how human activity has changed the local environment.</li> </ul>	<ul style="list-style-type: none"> <li>Biodegradable vs. non-biodegradable.</li> <li>Issue - physical and chemical dangers of rubbish.</li> </ul>
Five	<p><b>Science as a Human Endeavour/Use and Influence of Science</b> Scientific knowledge is used to inform personal and community decisions. <b>ACSHE217</b></p>	<ul style="list-style-type: none"> <li>Consider how scientific knowledge may influence a person's choices e.g. use of cloth shopping bags, recycling practises.</li> <li>Explore how the local community authority uses scientific knowledge to make decisions about waste management.</li> </ul>	<p>Same as previous plus</p> <ul style="list-style-type: none"> <li>Options for waste management at a personal and community level e.g. recycling, reusing, composting, chooks, picking up rubbish.</li> </ul>
Six	<p><b>Science as a Human Endeavour/Use and Influence of Science</b> Scientific knowledge is used to inform personal and community decisions. <b>ACSHE220</b></p>	<ul style="list-style-type: none"> <li>Consider how scientific knowledge may influence a person's choices e.g. use of cloth shopping bags, recycling practises.</li> <li>Explore how the local community authority uses scientific knowledge to make decisions about waste management.</li> </ul>	<p>Same as previous</p>

# Biological Sciences

Year	Content Description	Elaborations	Teaching Points
<b>Seven</b>	<p><b>Science Understanding /Biological Sciences</b> Interactions between organisms can be described in terms of food chains and food webs; human activity can affect these interactions. <b>ACSSU112</b></p> <p><b>Science as a Human Endeavour/Use and Influence of Science</b> Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations. <b>ACSHE120</b></p>	<ul style="list-style-type: none"> <li>Investigating the effect of human activity.</li> <li>Exploring how living things (humans) can cause changes to their environment and impact other living things.</li> <li>Considering how human activity in the community can have positive and negative effects on the sustainability of ecosystems.</li> </ul>	<p>Same as previous plus</p> <ul style="list-style-type: none"> <li>Chemical toxins.</li> <li>Biomagnification (for more able students).</li> </ul>

# Geography

Year	Content Description	Elaborations	Teaching Points
<b>Four</b>	<p><b>Geographical Knowledge and Understanding</b> The sustainable management of waste from production and consumption. <b>ACHGK025</b></p>	<ul style="list-style-type: none"> <li>Describing how natural processes can break down and recycle some wastes safely, for example, through composting or purifying water as it moves through the environment.</li> <li>Exploring different ways of managing wastes sustainably and how these may include the principles of reduce, reuse, recycle and replace.</li> </ul>	<ul style="list-style-type: none"> <li>Renewable vs. non-renewable.</li> <li>Biodegradable vs. non-biodegradable.</li> <li>What are micro-organisms?</li> </ul>
<b>Five</b>	No relevant curriculum		
<b>Six</b>	No relevant curriculum		
<b>Seven</b>	<p><b>Geographical Knowledge and Understanding</b> Unit 1: Water in the world. The ways that flows of water connect places as it moves through the environment and the way this affects places. <b>ACHGK038</b></p>	<ul style="list-style-type: none"> <li>Explaining how the movement of water through the environment connects places.</li> <li>Investigating the environmental, economic and social effects of water as it connects places.</li> </ul>	<p>Same as Year 4 plus</p> <ul style="list-style-type: none"> <li>Effect of pollution on bushland flora and fauna such as: <ul style="list-style-type: none"> <li>death of wildlife; and</li> <li>Chemical toxicity caused by plastic and cigarette butts.</li> </ul> </li> </ul>



## Background Activities

- Explore the impact of rubbish on the environment (with an emphasis on fauna).
  - *Behind the News* (ABC, 2014) has several good video clips on rubbish and recycling.

## Student Activity: Litter

- This text has a large amount of information on it so may not be suitable for less able readers, however it may be used in small groups. There are two versions – Year 4/5 and Year 6/7.
- This worksheet (two versions: Year 4/5 and Year 6/7) is best completed after viewing some short films, images of rubbish (try Google images) and discussion about littering.
- Year 4/5:
  - A bar graph of the rubbish decay time could be constructed in groups or as a whole class. The type of rubbish or pictures of that rubbish could be used inside the columns. For example pictures of apple cores could be glued into that column.
  - Follow up activities could include: Letter to the Editor (*Persuasive Writing Table* is available for this), poster promoting proper rubbish disposal, school or bushland clean up day, school or local bushland rubbish inventory.
- Year 6/7
  - The bar graph is included as a part of the worksheet.
  - A *Persuasive Writing Table* is included at the end of the worksheet. The purpose being to write a Letter to the Editor of the local newspaper.

## References

- ABC, 2014, *Behind the News*, <http://www.abc.net.au/btn/>
- Blenheim Films, 2013, *Trashed: No Place for Waste*, <http://www.trashedfilm.com/>
- City of Joondalup, 2009, *Geography and Science: Waste Education - Reduce, Reuse, Recycle, Recover*, <http://www.joondalup.wa.gov.au/Explore/SchoolConnections/GeographyandScience.aspx>
- Clean Up Australia, no date, *Clean Up*, <http://www.cleanup.org.au/au/>
- Kanyana Wildlife Centre, no date, *Kanyana Wildlife*, <http://www.kanyanawildlife.org.au/>
- Keep Australia Beautiful, 2014, *Keep Australia Beautiful*, <http://kab.org.au/>
- Mindarie Regional Council (MRC), 2014, *We Love Talking Rubbish!*, <http://www.mrc.wa.gov.au/Education-Resources.aspx>
- Native Animal Rescue, no date, *Native Animal Rescue*, <http://www.nativeanimalrescue.org.au/>
- Youtube, no date, *How to Destroy the World "Rubbish"*, <http://www.youtube.com/watch?v=u0OQPvY0S1o&feature=youtu.be>