

Love Food Hate Waste Education Resources Curriculum Map

The following curriculum links tool is designed to support teachers in NSW and Victoria when mapping the Love Food Hate Waste resources against state syllabus outcomes.



LOVE
FOOD
hate waste

Year 1 - How to Save Food

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 1 – Science Science as a Human Endeavour ACSHE022 People use science in their daily lives, including when caring for their environment and living things</p>	<p>Stage 1 - Science & Technology Living World ST1-4LW-S Describes observable features of living things and their environments</p>	<p>Foundation to Level 2 – Science Science as a Human Endeavour VCSSU041 People use science in their daily lives</p>
<p>Year 1 – English Literacy ACELY1656 Engage in conversations and discussions, using active listening behaviours, showing interest, and contributing ideas, information and questions</p>	<p>Stage 1 - English Communicate through speaking, listening, reading, writing, viewing and representing EN1-1A Communicates with a range of people in informal and guided activities demonstrating interaction skills and considers how own communication is adjusted in different situations</p>	<p>Level 1 – English Literacy - Interacting with others VCELY210 Engage in conversations and discussions, using active listening, showing interest, and contributing ideas, information and questions, taking turns and recognising the contributions of others</p>

Year 2 - Cupboard, fridge or freezer – which is best?

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 2 – Science Science Understanding ACSSU032 Earth's resources are used in a variety of ways</p> <p>Science as a Human Endeavour ACSHE035 People use science in their daily lives, including when caring for their environment and living things</p>	<p>Stage 1 - Science & Technology Knowledge & Understanding ST1-5LW-T Identifies how plants and animals are used for food and fibre products</p> <p>Living World ST1-4LW-S Describes observable features of living things and their environments</p>	<p>Foundation to Level 2 – Science Earth & Space Sciences VCSSU047 Earth's resources are used in a variety of ways</p> <p>Science as a Human Endeavour VCSSU041 People use science in their daily lives</p>
<p>Year 2 – English Literacy ACELY1666 Listen for specific purposes and information, including instructions, and extend students' own and others' ideas in discussions</p>	<p>Stage 1 - English Communicate through speaking, listening, reading, writing, viewing and representing EN1-1A Communicates with a range of people in informal and guided activities demonstrating interaction skills and considers how own communication is adjusted in different situations</p>	<p>Year 2 – English Literacy - Interacting with others VCELY244 Listen for specific purposes and information, including instructions, and extend students' own and others' ideas in discussions through initiating topics, making positive statements, and voicing disagreement in an appropriate manner</p>

Year 3 - What is food waste and why does it happen?

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 3 – Science Science as a Human Endeavour ACSHE051 Science knowledge helps people to understand the effect of their actions</p>	<p>Stage 2 - Science & Technology Working Scientifically ST2-1WS-5 Questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations</p>	<p>Levels 3 and 4 - Science Science as a Human Endeavour VCSSU056 Science knowledge helps people to understand the effects of their actions</p>
<p>Year 3 – Humanities and Social Sciences (HASS) Civics and Citizenship ACHASSK071 Who makes rules, why rules are important and the consequences of rules not being followed</p>	<p>Stage 2 – Personal Development, Health and Physical Education (PDHPE) Health, Wellbeing and Relationships PD2-9 Demonstrates self-management skills to respond to their own and others' actions</p>	<p>Levels 3 and 4 – The Humanities Civics & Citizenship VCCCL005 Distinguish between rules and laws and discuss why rules and laws are important</p>

Year 4 - What a waste! How much does food waste cost?

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 4 – Mathematics Number and Algebra ACMNA080 Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies</p> <p>Fractions and Decimals ACMNA079 Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation</p>	<p>Stage 2 – Mathematics Number and Algebra MA2-5NA Uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers</p> <p>Number and Algebra MA2-4NA Applies place value to order, read and represent numbers of up to five digits</p>	<p>Level 4 – Mathematics Number & Algebra VCMNA160 Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies</p> <p>Number & Algebra VCMNA159 Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation</p>
<p>Year 4 – Humanities and Social Sciences (HASS) Geography ACHASSK090 The use and management of natural resources and waste, and the different views on how to do this sustainably</p>	<p>Stage 2 – Human Society and its Environment (HSIE) Geography GE2-3 Examines differing perceptions about the management of places and environments</p>	<p>Levels 3 and 4 – The Humanities Geography VCGGK082 Types of natural vegetation and the significance of vegetation to the environment, the importance of environments to animals and people, and different views on how they can be protected; the use and management of natural resources and waste, and different views on how to do this sustainably</p>

Year 5 - What a waste! But what exactly are we wasting?

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 5 – Science Science Understanding ACSSU077</p> <p>Solids, liquids and gases have different observable properties and behave in different ways</p>	<p>Stage 3 - Science & Technology Physical World ST3-8PW-ST</p> <p>Explains how energy is transformed from one form to another</p>	<p>Levels 5 and 6 – Science Chemical Sciences VCSSU059</p> <p>A change of state between solid and liquid can be caused by adding or removing heat</p>
<p>Year 5 – Humanities and Social Sciences (HASS) Geography ACHASSK113</p> <p>The environmental and human influences on the location and characteristics of a place and the management of spaces within them</p>	<p>Stage 3 – Human Society and its Environment (HSIE) Geography GE3-3</p> <p>Compares and contrasts influences on the management of places and environments</p>	<p>Levels 5 and 6 – The Humanities Geography VCGGK096</p> <p>Environmental and human influences on the location and characteristics of places and the management of spaces within them</p>

Year 6 - How can I prevent food waste and be a food boss?

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 6 – Science Science Understanding ACSSU095</p> <p>Changes to materials can be reversible or irreversible</p>	<p>Stage 3 – Science & Technology Material World ST3-7MW-T</p> <p>Explains how the properties of materials determines their use for a range of purposes</p>	<p>Levels 5 and 6 – Science Chemical Sciences VCSSU077</p> <p>Changes to materials can be reversible, including melting, freezing, evaporating, or irreversible, including burning and rusting</p>
<p>Year 5 and 6 – Health and Physical Education Personal, Social and Community Health ACPPS054</p> <p>Plan and practise strategies to promote health, safety and wellbeing</p>	<p>Stage 3 – Personal Development, Health and Physical Education (PDHPE) Health, Wellbeing and Relationships PD3-1</p> <p>Identifies and applies strengths and strategies to manage life changes and transitions</p>	<p>Levels 5 and 6 – Health and Physical Education VCHPEP108</p> <p>Plan and practise strategies to promote health, safety and wellbeing</p>

Year 7 - How does food waste harm the environment and what can we do to prevent it?

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 7 – Science Science Understanding ACSSU116 Some of Earth’s resources are renewable, including water that cycles through the environment, but others are non-renewable</p>	<p>Stage 4 – Science & Technology Earth & Space SC4-13ES Explains how advances in scientific understanding of processes that occur within and on the Earth, influence the choices people make about resource use and management</p>	<p>Levels 7 and 8 – Science Earth and Space Sciences VCSSU100 Some of Earth’s resources are renewable, but others are non-renewable VCSSU100</p>
<p>Year 7 – Humanities and Social Sciences (HASS) Geography ACHASSK185 The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa</p>	<p>Stage 4 – Human Society and its Environment (HSIE) Geography GE4-5 Discusses management of places and environments for their sustainability</p>	<p>Levels 7 and 8 – The Humanities Geography VCGGK108 Nature of water scarcity and the role of humans in creating and overcoming it, including studies drawn from Australia and West Asia and/or North Africa</p>
<p>Year 7 and 8 –Technologies Design and Technologies Knowledge and Understanding ACTDEK029 Investigate the ways in which products, services and environments evolve locally, regionally and globally and how competing factors including social, ethical and sustainability considerations are prioritised in the development of technologies and designed solutions for preferred futures</p>	<p>Stage 4 - Science Technology & Society TE4-10TS Explains how people in technology related professions contribute to society now and into the future</p>	<p>Levels 7 & 8 – Technologies Design and Technologies VCDST043 Examine and prioritise competing factors including social, ethical, economic and sustainability considerations in the development of technologies and designed solutions to meet community needs for preferred futures</p>

Year 8 - Be a waste warrior! Take the pledge to reduce food waste!

AUSTRALIAN CURRICULUM	NSW SYLLABUS	VIC SYLLABUS
<p>Year 8 - Science Science as a Human Endeavour ACSHE135 Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations</p>	<p>Stage 4 - Science Design & Production TE4-1DP Designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities</p>	<p>Levels 7 and 8 – Science Science as a Human Endeavour VCSSU090 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</p>
<p>Year 8 – Geography Geographical Knowledge & Understanding ACHGK051 Human causes and effects of landscape degradation</p>	<p>Stage 4 – Human Society and its Environment (HSIE) Geography GE4-3 Explains how interactions and connections between people, places and environments result in change</p>	<p>Levels 7 and 8 – The Humanities Geography VCGGK119 Human causes of landscape degradation, the effects on landscape quality and the implications for places</p>



YEAR 5

What a waste!

But what exactly are we wasting?

LESSON OVERVIEW



This lesson has been developed to build student understanding of exactly how much food waste is going into the classroom bin and their household bins for short period of time e.g. a few days but no longer than a week. They will research the production and distribution of an item of food waste found in the classroom bin as a farm to shelf, or farm to plate study. They will investigate the impact that food waste has regarding time, energy, resources, money and the actual food product. Furthermore, they will discuss preventative and management strategies to reduce food waste such as utilise composting and charities.

LEARNING INTENTION



Students will:

- Identify the types of foods being wasted by families and in the classrooms each week
- Research the farm to table journey of an item of food waste
- Reflect upon and record the impacts on our society, environment and economy when an item becomes food waste

RESOURCES



- Butcher's paper
- Interactive whiteboard with internet connection
- Student worksheet
- Laptops, computers and/or tablets
- Whiteboard for recording
- A container with a lid to collect food waste in the classroom (2 Litre ice cream container may be ideal)
- Optional - calculators

DIFFERENTIATION



Support: Teacher scaffolds tasks and questions to suit student ability, students work with others and adults to complete tasks
Structured: Use small group instruction to help support students, complete their research and create worksheet
Extension: Students research independently, with the option to extend their flow charts into the household and then landfill

ASSESSMENT



- Monitoring understanding throughout class discussion and questioning
- Collecting work samples
- Teacher feedback

AUSTRALIAN CURRICULUM LINKS



Science
Science Understanding - Solids, liquids and gases have different observable properties and behave in different ways ([ACSSU077](#))

Humanities and Social Sciences
Geography - The environmental and human influences on the location and characteristics of a place and the management of spaces within them ([ACHASSK113](#))



LESSON INTRODUCTION - 5 MINUTES



Before lesson

Ask selected students to inspect the classroom rubbish each day for a designated period of time and record the food items and quantities being thrown away. Competition between classes to see which wastes the least and which class improves the most.

1. Review the list of classroom food waste. Discuss and brainstorm why certain items are being thrown out at school. Ask students to reflect on their household bins and how much food waste is being thrown out each week.
2. Discuss the concept of food waste – i.e. food that is discarded but still edible. Ask students to discuss why wasting food is detrimental to society (raise ideas around how hunger affects the homeless, world hunger and famine levels on a mass scale), our environment (using water to grow food, fuel to truck it to supermarkets, food going to the rubbish etc.), and our economy (giving food away, production costs, etc.). Teacher Tip – Use the following report to gain further context and insight - <https://www.foodbank.org.au/wp-content/uploads/2018/12/2018-Foodbank-Hunger-Report.pdf>
3. In this discussion students also may devise practical solutions for preventing food waste and secondary actions such as recycling, donating, or composting. Ask students if they know of any strategies in shops, the community etc. that are helping curb and prevent food waste. Examples include; compost bins, charity food drives, supermarket initiatives such as ‘odd bunch’ fruit and vegetable packaging, food hampers etc.

MAIN BODY OF TEACHING - 25 MINUTES



4. Propose the question to students – “What else are we wasting besides food?” Record their ideas on butcher’s paper or an interactive whiteboard. They may suggest things like money, packaging, things or that can be composted. Ask the students to brainstorm the processes that go into growing and packaging food in order for it to arrive on a supermarket shelf. What is being wasted along the way? Write their ideas on butcher’s paper or an interactive whiteboard. Examples include; soil, water, energy, packaging and treatment, or human effort.
5. Ask students to select a fresh fruit or vegetable item from the classroom food waste list to research its journey from farm to plate. Students can use laptops, computers or tablets to research the steps involved, or this can be done as a whole class using videos, texts and sites that the teacher has found on a specific food. Examples online include:
 - ‘All About Eggs’ www.allabouteggs.com.au
 - ‘Life of a strawberry, stop food waste, save the food’ www.youtube.com/watch?v=G0x50yzzQXRU
 - ‘Crunchy carrots: from farm to fork’ www.youtube.com/watch?v=Pf74rrm1uLk
 - ‘Western Australian carrots - from paddock to you’ www.youtube.com/watch?v=Fv_dbu_6k20
 - ‘From paddock to plate’ http://education.abc.net.au/res/teacher_res/3-paddock-plate.html

Look at visual flow charts online of a food’s journey from farm to plate and analyse the steps in the journey, including the cyclic nature of composting and recycling.



MAIN BODY OF TEACHING - 25 MINUTES



Examples online include:

- Local food system <https://mastersoftmedia.hum.uva.nl/blog/2012/03/27/visualizing-food-systems/>
- 'Flow chart of canning foods' www.fhbnews.com/Top-News/canning-of-fruits-and-vegetables-38522
- Animals in the compost cycle <https://earthmatter.org/compost-learning-center/animals-in-the-cycle/>
- 'Composting life cycle' www.compostcommunity.org/apps/blog/show/44136031-composting-spotlight-life-cycle-of-a-banana-peel <https://wealthfromwaste.wordpress.com/2016/06/12/blog-post-a-1-day-waste-audio/>

6. Students work in small groups, pairs or independently using devices to research. Record their findings using the flow chart on their worksheet. They must describe the steps using diagrams and words then record what would be wasted at each step if that item of food was to end up in the bin. For example; soil, seeds, water, human energy through machines, electricity to run machines, cardboard, plastic, fuel for transport, and time. Depending on student ability, model or assist students with the completion of the flow chart, or complete one jointly and another independently.
7. Students share their findings on certain foods with the class. Discuss the impact of all that waste on our farming and supermarket industries. As a class brainstorm and record simple ways that households and individuals can prevent wasting food, especially the food that they researched.

PLENARY - 15 MINUTES



8. Watch the video 'Don't let great taste go to waste,' found at: <https://www.lovefoodhatewaste.vic.gov.au/Video-Gallery> or on YouTube at <https://www.youtube.com/watch?v=PW1dSuafyUE>
- In extension, you may like to watch the following video which is a great visual representation of how food waste equates to money waste - <https://youtube.com/VGTPKKOVoz4>
9. Discuss the bigger picture of reducing food waste and its effects not just on families and households, but on communities, retail, farming and agriculture, and the environment.

HOME ACTIVITY / EXTENSION TASK IDEAS



FOR HOME

Students use the home worksheet to complete a checklist of foods in their bin or refrigerator, reflecting on the types of resources that are required to process and transport that item from farm to shelf. They then complete a flow chart showing the journey of an item of food in their household, depicting its journey from 'farm to fridge.'

EXTENSION

Students film their own short news articles or mini documentaries where they explain what is wasted when we throw out food and provide some tips for avoiding food waste. These videos can be shown to other classes or shared with the community via the school's media channels.

EXTENSION

Watch the NSW EPA video 'Why reduce food waste?' www.youtube.com/watch?v=239w4m3gi0&list=PL1302B1oFT9LkPpF2GQ04DVgolUBviuW&index=17 and discuss the harmful gases that organic waste emits in landfill. Research these gases and how they are harmful for the environment.

These resources have been developed by



Name Date

What a waste! But what exactly are we wasting?



What resources are we wasting during the journey of _____

Research the journey of an item of food, from the farm to the pantry shelf.

Record the steps and describe exactly what, why and how resources might be wasted along the way e.g. oil, seeds, water, human energy through machines, electricity to run machines, cardboard, plastic, fuel for transport, and time.

Step 1 – Farm produces product	Step 2 _____
What was wasted? Why, how?	What was wasted? Why, how?

Step 4 _____	Step 3 _____
What was wasted? Why, how?	What was wasted? Why, how?

Step 5 _____	Step 6 _____
What was wasted? Why, how?	What was wasted? Why, how?