

5 AT HOME SUSTAINABILITY ACTIVITIES FOR SECONDARY SCHOOL STUDENTS

The following actions are ideal for secondary school students looking for practical ways to engage with sustainability at home. These ideas will assist students to reduce waste, promote biodiversity, conserve water and energy and take action on climate change while addressing English, Mathematics, Science and Humanities key learning areas.

1. WASTE FREE MENU PLAN

Reducing food waste is one of the most important actions to combat climate change according to Project Drawdown. When food is wasted, the energy and water used to grow, harvest, pack and transport it is also wasted and, when food waste ends up in landfill, it produces the methane which contributes to global warming.

To reduce food waste at home, students can use the **attached templates** to complete an audit of their own household to identify what food items they have and what items are frequently wasted (templates below). From there, students can create a weekly waste free meal plan, write a shopping list with items that are genuinely required, cook meals, organise storage solutions to avoid spoilage and generate creative ways to avoid sending any food waste to landfill (such as creating vegetable stock out of scraps, pickling or dehydrating food and composting any leftover items). Sustainability Victoria's Love Food, Hate Waste [website](#) contains a wealth of information including [recipes](#), [meal planning](#), food storage and composting solutions.

Extension: Create a recipe (or recipe book) with clever ways to reduce food waste. Students may like to share images or videos of their creations on social media (if permitted).

2. DESIGN AND CREATE AN INSECT HOTEL

Designing and creating an [insect hotel](#) is a wonderfully creative way to provide safety and shelter for local insects and pollinators. Students can design their own hotel using found materials such as non-treated wood, bamboo, recycled bottles, string, twigs and sticks. To engage with the broader community, students may like to record a video or step by step photos of the process on their social media if permitted. Additional information can be found on permaculture websites such as [this one](#).

Extension: Engage in citizen science programs to celebrate and record biodiversity in the backyard. SWIFFT has a range of resources on their [website](#) including Backyard Bird Count, Birddata and NatureWatch. Students may also like to contact their local council to find out about local programs or get involved in bee conservation through the [Wild Pollinator Count](#).

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3. WATER TANK CALCULATOR

This activity engages students in the calculation of roof runoff on a building at home to determine a suitably sized water tank. Students have the opportunity to develop applied mathematics skills and investigate the environmental benefits of harvesting water. Access the student learning activity [here](#).

Extension: Conduct a [home water audit](#) to determine other ways to save water. Students may also like to investigate the [EPA Guidelines](#) for the use of rainwater at home.

4. ELECTRICITY USE AT HOME

This task equips students with basic auditing skills and develops awareness around energy consumption at home. The exercise allows students to learn where electricity is used at home, investigate how much is used and the frequency of use over time. Students are then able to readily identify where electricity use is highest and develop recommendations for energy saving opportunities. Access the student learning activity [here](#).

Extension: Develop a home action plan to implement energy saving actions and systems at home based on findings. Students may also like to research subsidies and rebates for solar or GreenPower through their local council website or [Solar Victoria](#).

5. CLIMATE ACTIVISM

Now to spread the word! Create a sign, climate flag or design a t-shirt that addresses climate change or any environmental issue you are passionate about. For inspiration, students can check out these [climate posters](#) or [climate flags](#) from around the globe. Then, students can join the [Fridays For Future](#) online climate strike by taking a picture of themselves holding their sign or climate flag and posting it on social media (if permitted) using the hashtags #ClimateStrikeOnline, #FridaysForFuture and #DigitalStrike. Students can also access online classes through [School Strike 4 Climate](#) or join the [Extinction Rebellion](#) climate movement.

Extension: Write a persuasive letter about climate justice or an environmental issue of your choice, to your school principal, local MP, state or federal government. This will allow students to explore ways to help tackle environmental problems (climate change, biodiversity loss, bushfires, logging, waste and recycling etc.) from their own home. Students should clearly outline their opinion and include at least three reasons using persuasive devices. [Click here](#) to learn how to write an effective letter to MPs (Member of Parliament) or go to [#FridaysForFuture](#) to view their youth climate strikers open letters to world leaders.

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AT HOME FOOD WASTE AUDIT TEMPLATE

Each day for one week, list the food items that are wasted at each meal. Afterwards, note which items were commonly wasted and use this knowledge to inform your shopping list, menu planning and food storage solutions.

	Breakfast	Lunch	Dinner	Snacks
	Type of food waste (list all)			
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

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HOME FOOD AUDIT TEMPLATE

List the items that you already have in your home pantry, fridge and freezer. Once this is complete, rank the items underneath according to what needs to be used first. This will assist with creating a shopping list and menu plan.

PANTRY	FRIDGE	FREEZER
<ol style="list-style-type: none">1.2.3.4.5.6.7.8.9.10.	<ol style="list-style-type: none">1.2.3.4.5.6.7.8.9.10.	<ol style="list-style-type: none">1.2.3.4.5.6.7.8.9.10.