



Baylab

Food Waste Warrior

Teacher Pack

Key Stage 2:
Years 3 to 6

Did you know that by 2050 the population will be around 10 billion?

With pressures from climate change and less land, it's predicted we will need 50% more food to feed the world. There are lots of challenges in the way of us achieving this, but thankfully science holds some of the potential solutions, and did you know, you do too?

As citizens, we can all make a difference by being more aware and changing our habits. With 30-50% of all food currently going to waste each year, we can all make a conscious effort to improve the amount of food we waste. By reducing food waste, we could help bridge the gap needed to achieve the projected increase in food production.

The Baylab and Veg Power have collaboratively designed this resource to help schools teach students about our responsibility as citizens of the planet, and the impact we have when it comes to food waste and future food supply.

Covering skills such as analysis, literacy, and numeracy, the Baylab and Veg Power hope this project will help students understand how we are all accountable for the future of our planet. So, in the quest to help reduce food waste, students will join Sydney the Scientist on a series of missions around their home and become official

Food Waste Warriors!



VEGPOWER

In This Pack



You will find the following information to coordinate this activity in your school:

- Instructions
- Lesson plan
- Official Food Waste Warrior Certificate

Running This Activity

To carry out this activity in your school, you could run it as part of PSCHÉ, Geography, Science or topics linked to food production, including the harvest festival, plants, or farming.

For this activity, you will need:

- 1 hour lesson time
- Baylab and Veg Power PowerPoint Presentation
- Baylab and Veg Power Student Pack


In the Student Pack, each student will find the following 4 missions:

Mission 1: Waste Watch Make a note of all the food waste produced, from preparing your food to eating it.	Mission 2: Date Sort With a parent or guardian, trawl through your fridge and make a list of the use-by dates for 8-10 items. Sort them into date order and decide what needs saving first.	Mission 3: Storage How does the way you store your food effect the shelf life? Have a peak in the kitchen to try and identify the best places to keep different items.	Mission 4: Weigh-In With the help of a parent or guardian (if necessary), weigh your daily food waste.
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All 4 missions have been created with teachers, students, and parents / guardians in mind.

However, Baylab and Veg Power recognise that completion of all 4 missions may not be preferred or possible for everyone, so you are welcome to select any 1 or more (including all 4) of the missions for students to complete. Further details on how your students can fill the Student Pack out when completing their missions can be found in Appendix A of this resource. Whilst the missions are designed to be completed at home following a class lesson, Mission 3 could be done in class if preferred, with answers for Mission 3 found in Appendix B of this pack.

Please note that to help encourage the investigation of a family's total food waste impact, this activity has been created with a degree of parent / guardian involvement in mind. However, the degree of such involvement is entirely up to you.



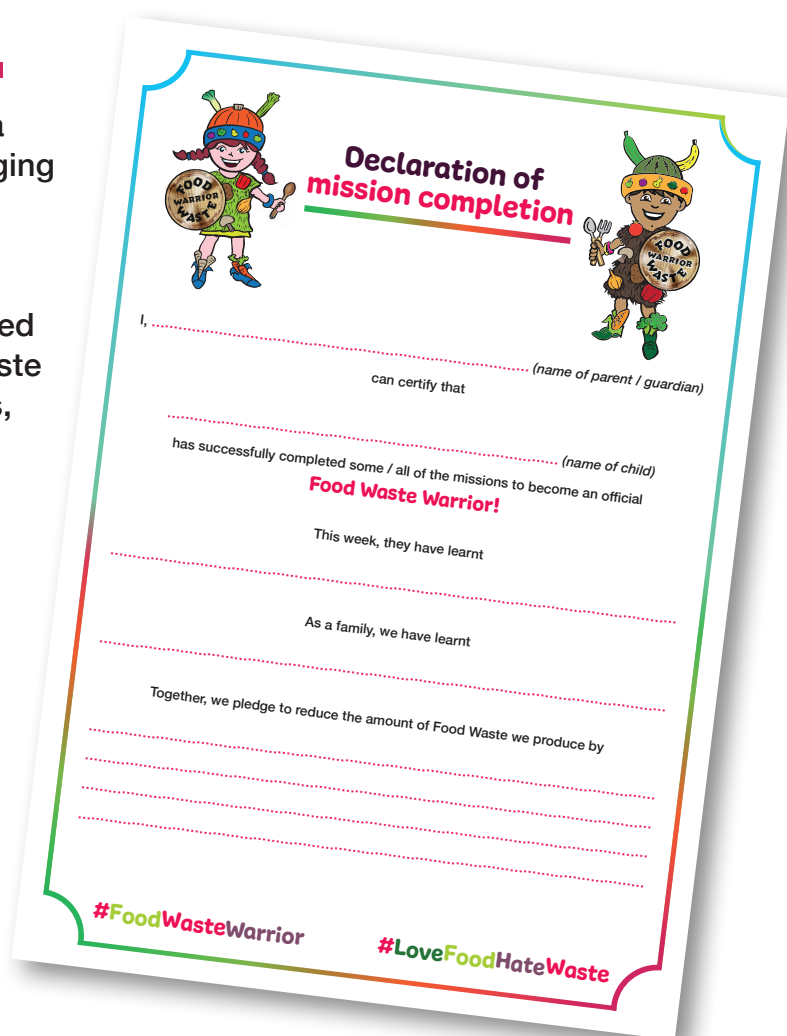
Upon Completion

At the end of the Student Pack, you will find a 'Declaration of mission completion', encouraging families to make pledges on what they have learnt and how they will improve their food waste to continue helping the planet. Ideally, once students have completed their designated missions and proven themselves as Food Waste Warriors, they will, together with their families, fill this out.

Suggestions for use of these pledges to evidence change and activity impact could be:

1. Creating a notice board of all the pledges from your students in the classroom.
2. Filming a class video on how your class will reduce food waste at home.
3. Sharing some of the best pledges with us via Twitter using: **#WasteLessPledge** OR **#PledgeToWasteLess**, and ensuring you tag **@Bayer4CropsUK**, **@UKBayer**, and **@VegPowerUK**, with **#FoodWasteWarrior** and **#LoveFoodHateWaste**.

After students complete the designated missions and submit their pledges (if feasible to do so), teachers are encouraged to print and handout the Food Waste Warrior Certificate, found at the end of this pack.



Declaration of mission completion

I, (name of parent / guardian)
can certify that
..... (name of child)
has successfully completed some / all of the missions to become an official
Food Waste Warrior!

This week, they have learnt
.....

As a family, we have learnt
.....

Together, we pledge to reduce the amount of Food Waste we produce by
.....
.....
.....

#FoodWasteWarrior **#LoveFoodHateWaste**



GREAT WORK

Well done
You have successfully completed your mission
and helped our planet!

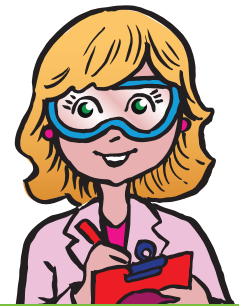
Sydney is proud to declare you an official
Food Waste Warrior!

Signed Date

#FoodWasteWarrior **#LoveFoodHateWaste**

Food Waste Lesson Plan:

To be used with PowerPoint



Slide	Content	Resources
2	Contents.	n/a
3	Introduction to the Food Waste Warrior initiative, brought to you by Baylab and Veg Power, to help tackle the problem of food waste.	
4	An introduction to the Food Waste Warrior challenge.	
5 - 11	Did you know? Explanation of food systems as a huge contributor to climate change, and that the majority of food wasted is in fact edible. Explore the chain of waste and listen to what Farmer Tom has to say about food waste on the farm.	n/a
12-14	Quiz - starting with multiple choice and progressing to guessing. Explanation of why the statistics in the quiz present a problem: since food waste contributes to climate change, and climate change is predicted to destroy arable land and crops, but the population is growing, we need to produce a lot more food to feed everybody.	
15	Driving Change.	Mini white-board per person.
16-17	How will we reduce food waste? Talk to students about how science can play a part, but how society equally has a big role to play.	n/a
18	Have you ever wasted food: Ask your students about all the times they've wasted food in the past week.	Paper and pencil/pen.
19	How do you think you could reduce food waste at home? Collectively as a class, come up with ideas.	Work in groups. Give students a piece of paper to come up with ideas.
20	What do your students know about sell by dates and use by dates? Discuss and watch the video.	n/a
21-24	Meeting Sydney the Scientist, who wants to inspire us all to do our bit in the fight against food waste! She is challenging the students to four missions, of which students can complete as many as you would like them to. Information on all missions are below, and extra slides are included at the end of the PowerPoint: you can choose how you would like to introduce these to your class.	n/a
	Mission 1: Waste Watch - students help their parents / guardians cook a meal and take a note of all the food wastage, from preparing to eating. They collect information such as: meal type, meal name, ingredients and food waste produced. As an extension, they are to think about how they might use this waste in another meal (for example, a veg frittata!).	Food Waste Warrior Student Pack.
	Mission 2: Date Sort - students go through their fridge, listing 8 – 10 food items, sell-by dates, and days left until the food becomes waste, thinking about which foods need saving earlier, and how they might be used.	Food Waste Warrior Student Pack.

Food Waste Lesson Plan:

To be used with PowerPoint *(continued)*

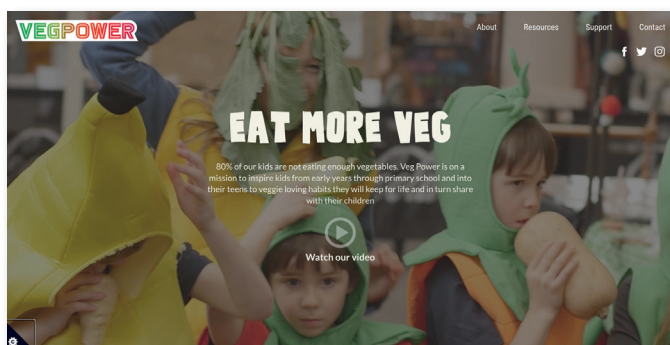
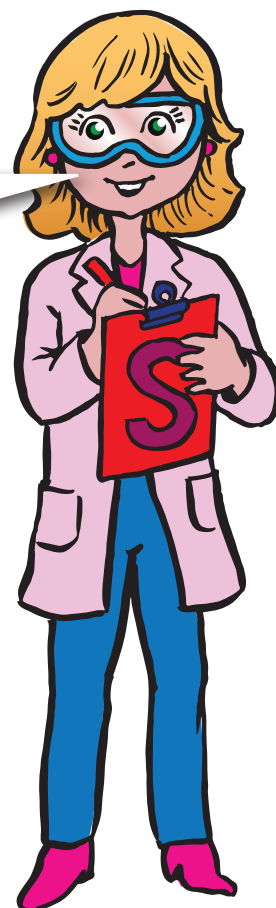


Slide	Content	Resources
	Mission 3: Storage - students write down where they store their food and attempt to explain how this helps reduce food waste.	Food Waste Warrior Student Pack.
	Mission 4: Weigh-In - students measure their food waste each day by tracking and weighing their daily waste in a bowl, thinking about what they could do to reduce this wastage. Optionally, the students can repeat the exercise the following week, implementing their ideas to see if their amount of food waste decreases.	Food Waste Warrior Student Pack.
25	Conclusion: a reminder that there is a certificate and the status of Food Waste Warrior up for grabs!	n/a
26	Goodbye from the Baylab and Veg Power!	n/a
Extra Slides		
27	Mission 1: Waste Watch.	
28	Mission 2: Date Sort.	
29	Mission 3: Storage.	
30	Mission 4: Weigh-In.	
31	Answers to Mission 3.	



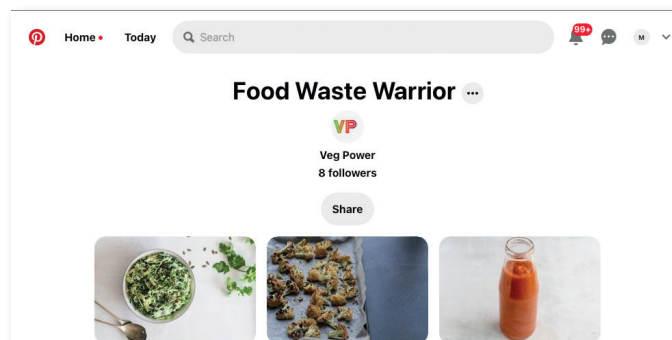
Get In Touch

We hope your students enjoy engaging with this topic. Should you have any questions about this resource specifically, please contact baylabinfo@bayer.com



To find out more about Veg Power, please visit their webpage [HERE](#), where you can find further information and recipes on how to encourage young people to eat more veg and waste less.

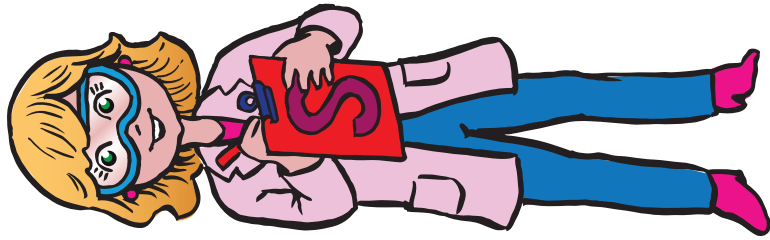
Don't forget you can also check out the Veg Power Recipes linked to Mission 1 of this activity [HERE](#).



To find out more about the Baylab, please visit their webpage [HERE](#).



GREAT WORK



Well done

You have successfully completed your mission
and helped our planet!

Sydney is proud to declare you an official
Food Waste Warrior!

Signed

Date



#FoodWasteWarrior

#LoveFoodHateWaste

Appendix A:

Student Pack Formats

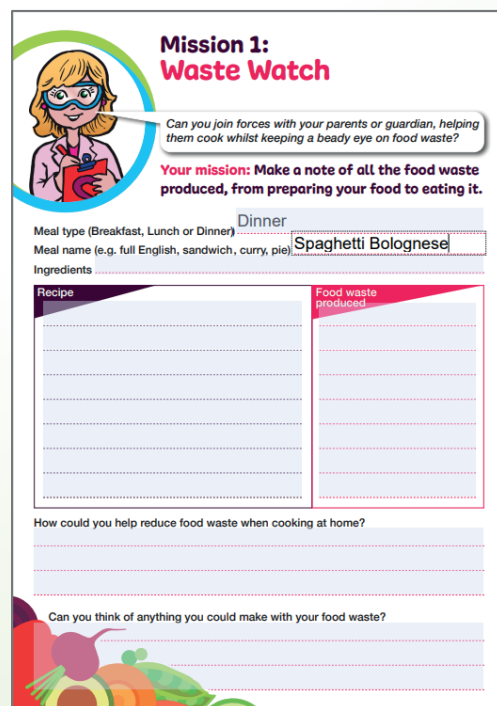
Depending on your school's needs and learning preferences, you can choose between the printable and electronic Student Packs for your students to complete.

Should you choose the digitally editable PDF version, you will need to know:

1. When your students open the pack to complete the first of their designated missions, they can live edit the document straightaway.

Once they have filled out what they need to, your students will need to 'save as' and close the document so they do not lose their work.

Tip: Ask students to use their initials when saving their pack to help you identify each student's work.



Mission 1: Waste Watch

Can you join forces with your parents or guardian, helping them cook whilst keeping a beady eye on food waste?

Your mission: Make a note of all the food waste produced, from preparing your food to eating it.

Meal type (Breakfast, Lunch or Dinner) Dinner

Meal name (e.g. full English, sandwich, curry, pie) Spaghetti Bolognese

Ingredients

Recipe	Food waste produced

How could you help reduce food waste when cooking at home?

Can you think of anything you could make with your food waste?



Mission 1: Waste Watch

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Meal name (e.g. full English, sandwich, curry, pie) Spaghetti Bolognese

Ingredients

2. Each time your students need to fill out more of their pack, they will need to right click the document they saved their pack as and open with 'Adobe Acrobat Reader DC'. This will allow them to select the fountain pen icon where they can then click against the fields that require completion.



Mission 1: Waste Watch

Can you join forces with your parents or guardian, helping them cook whilst keeping a beady eye on food waste?

Your mission: Make a note of all the food waste produced, from preparing your food to eating it.

Meal type (Breakfast, Lunch or Dinner) Dinner

Meal name (e.g. full English, sandwich, curry, pie) Spaghetti Bolognese

Ingredients Type text here



Mission 1: Waste Watch

Can you join forces with your parents or guardian, helping them cook whilst keeping a beady eye on food waste?

Your mission: Make a note of all the food waste produced, from preparing your food to eating it.

Meal type (Breakfast, Lunch or Dinner) Dinner

Meal name (e.g. full English, sandwich, curry, pie) Spaghetti Bolognese

Ingredients Onion, Tomatoes, Beef Mince

Appendix B:

Answers to Mission 3 - Storage

Milk	<i>Fridge - So it doesn't grow bacteria and go bad</i>
Nuts	<i>Fridge - Nuts contain high levels of fats which can go rancid (bad) unless refrigerated</i>
Carrots	<i>Fridge - The key to prevent soft carrots is to remove the greens and store them covered in water in the fridge.</i>
Broccoli	<i>Fridge - Trim the bottom from the stem and put it in a jar of water in the fridge, just like a flower. Your broccoli will last for weeks.</i>
Garlic	<i>Cupboard - Garlic likes ventilation and darkness but prefers a cool room than a cold fridge.</i>
Eggs	<i>Fridge or Cupboard - British eggs can be kept either in the cupboard or the fridge.</i>
Flour	<i>Cupboard - Flour should be kept away from air, moisture and light. So an airtight container in the cupboard is best.</i>
Lettuce	<i>Fridge - Store dry lettuce out of the bag it came in, in the fridge. Wash it just before you use it.</i>
Cucumber	<i>Fridge - Wash and dry the cucumber, then wrap in a paper towel and store in an open bag in the fridge</i>
Peppers	<i>Fridge - Put peppers unwashed in a closed plastic bag in the vegetable drawer in the fridge. They like the humidity in the bag, but also like being cold.</i>
Yoghurt	<i>Fridge - Keep it at the back of the fridge so the temperature is consistent (not the door)</i>
Dried Pasta	<i>Cupboard - Pasta does not go bad, but it can lose quality over time. Keep it in an airtight container in a dark place.</i>
Open tin	<i>Fridge - Move it to a glass or plastic container and cover.</i>
Tomatoes	<i>Counter and Fridge - Unripe tomatoes can be left on the counter. They will last longer if you store them with the green core facing down. You should move them to the fridge when they are ripe.</i>
Bananas	<i>Cupboard - Ripen bananas at room temperature</i>
Onions	<i>Fridge or cupboard - Onions like a cool, dry and well ventilated space. It could be a cupboard or the vegetable drawer of the fridge.</i>
Potatoes	<i>Cupboard or fridge - Away from light or moisture – so keep them in the dark and take them out of the plastic bag.</i>
Butter	<i>Fridge - A small amount can go on the counter so it is spreadable, but keep the rest in the fridge to keep it fresh.</i>
Apples	<i>Fridge - The best way to keep apples fresh is to store them in the crisper drawer of your refrigerator away from veg like avocados or peppers that can spoil quickly if they are near apples.</i>
Apples (cut slices)	<i>Fridge - Store apple slices in resealable bags in the fridge. A sprinkle of lemon juice will stop them turning brown.</i>
Left-over food	<i>Any leftover food should be put in the freezer or fridge within two hours of being cooked</i>
Mushrooms	<i>Keep them in the fridge in a paper bag, not sealed in plastic</i>

