

Student Pack

Key Stage 2: Years 3 to 6

Food Waste Warrior

Did you know we need to grow 50% more food by 2050 to feed the world?

Whilst we simply cannot afford to waste food, one third of our food goes to waste in the UK alone, which is actually enough to provide all chronically undernourished people with 10 meals per day, every day.

With population numbers expected to reach 10 billion by 2050 as well as a projected 20% loss in arable land and 17% loss in harvest due to climate change, our delicate food system is under enough pressure without the additional issue of food waste.

So how on earth will we grow enough food?

Well, scientists like those working to minimise the amount of food waste produced on the farm, are looking into this.

However, the planet needs everyone to play their part in helping to reduce food waste from field to fork, which means it's time to take action and become a

Food Waste Warrior!





Meet Sydney the Scientist

Sydney is passionate about using science to ensure "Health for All, Hunger for None". She works with plants, ensuring they are more resilient and can withstand changes in climate, which helps us to provide enough food for future generations. Sydney is also very passionate about food waste, but she unfortunately can't make a change alone and needs your help to do so!

Will you join Sydney in her quest to reduce food waste by completing some all-important missions in your home?

Then your mission starts here!

To help Sydney and become a **Food Waste Warrior** of our future, you must be responsible for monitoring food waste in your home. This means you will need to know what food waste is.

According to the Waste & Resources Action Programme (2020), food waste can be broken down into 3 categories:





- "Avoidable food and drink thrown away that was, at some point prior to disposal, edible (e.g. slice of bread, apples, meat)."
- "Possibly avoidable food and drink that some people eat, and others do not (e.g. bread crusts), or that can be eaten when a food is prepared in one way but not in another (e.g. potato skins)."
- "Unavoidable waste arising from food or drink preparation that is not, and has not been, edible in normal circumstances (e.g. meat bones, egg shells, pineapple skin, tea bags)."







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.

Moal type (Breakfast Tunch or Dinner)	
Meal type (Breakfast, Lunch or Dinner)	
Ingredients	
Recipe	Food waste produced
How could you help reduce food waste when cooking	g at home?
Can you think of anything you could make with you	ur food waste?



Remember, you can reduce the amount of wasted food each week by eating it! You can make something delicious with vegetables that are just past their 'best before' and reduce the amount of nutritious peel, leaves and stalks that end up in the bin.

There are some simple recipes you can make to help use up leftovers, so if you like the sound of the idea below, check out the **Food Waste Warrior Pinterest Board** for more inspiration!

Happy Scraps Frittata



Let every bit of veg left on your plate after a meal be the beginning of the next meal!

There is no reason for uneaten vegetables to land in the bin with this fantastic Happy Scraps Frittata.

Save waste, save money, eat more veg.

Ingredients

- Any of: Carrots, peas, mushrooms, peppers, tomatoes, sliced or cubed.
- 1 tablespoon of Olive Oil
- 6 free-range eggs, beaten
- 1 garlic clove
- 50g cheddar, grated
- Optional chopped herbs
- Salt & Pepper

Method

- Heat the olive oil in an oven-proof frying pan and add the cubes of leftover roasted veggies. Turn on the grill to medium.
- 2. Add half the grated cheese to the beaten egg and carefully pour into the pan of vegetables. Turn down the heat to low.
- 3. After 5 minutes, sprinkle the remaining cheese on the top of the pan.
- 4. Pop the pan under the grill for a further 5 minutes. Keep an eye on it to stop the topping from burning.
- 5. When it is cooked through (solid, not wobbly), remove from the grill. When the pan is cool, tip the frittata onto a plate and cut into wedges.





Mission 2:

Sell by date sort

- your fridge needs you!

Food Waste Warrior to be, there is an urgent call from the contents of your fridge, they need your help! Can you save them in time before they meet the dreaded pit of doom, THE BIN and become waste for all eternity?

Your mission: 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.

Food Item	Use-by date	Numbers of days left until it becomes waste

Which food items need saving first?





Mission 3: Store right, waste less

The best way to reduce food waste is to eat it, so storing your food in the right place is very important. Whilst you might think everything should go in the fridge, certain foods are actually best kept in the cupboard, freezer, or simply on a surface in the kitchen. Storing food items correctly helps prevent them from spoiling too quickly. Sydney the Scientist says:

Taste it, don't waste it! Eating more of the food you buy means saving money and helping the planet. When your food is stored in the right place, it will last longer and give you more time to enjoy it.

Have a look in your kitchen and try to identify why you store different foods in different places. I may even have some hints and tips that could help you along the way!

Your mission:

Looking at the chart below, complete the boxes; write down where you store each item and have a go at explaining why.

I store my	In the Choose from cupboard, fridge, freezer, kitchen counter	Because
Milk		
Nuts		
Garlic		
Carrots		
Broccoli		
Eggs		
Flour		
Lettuce		
Cucumber		
Pepper		
Yoghurt		
Dried pasta		
Open Tin		
Tomatoes		
Bananas		
Potatoes		
Butter		
Apples (whole)		
Apples (sliced)		
Mushrooms		

TIPS FOR STORAGE



What colour do
you think bananas
go if you leave them
in the fridge?

Answer: BLACK!



Onions make
potatoes grow roots!
Keep them apart so you
can enjoy your potatoes
root-free!



Unripe fruit will peak
quickly if you leave it next to
bananas for a day. Bananas give
off a gas called ethylene
which makes fruit nearby
ripen quickly.



Keep mushrooms in the fridge but remember to put them in sunlight for about half an hour before you cook them – the amount of Vitamin D will soar making your bones strong!



Did you know that storing
milk in the fridge door isn't ideal?
The temperature will fluctuate every
time the door opens, and this
can shorten the life
of your milk!



Don't chuck a wrinkly apple!
Chop and drop into boiling water
briefly. Freeze in a single layer
then bag the frozen chunks.
You can use them for cake
or apple sauce!



Opened tins in the fridge can make the food inside them taste of metal. Instead, save tinned leftovers in a covered bowl.



Mission 4: Waste weigh in -What's your impact?

Waste Warrior HQ wants to know how much waste you're creating on a weekly basis! Can you calculate your food waste for a whole week?

Your mission: With the help of a parent or guardian (if necessary), weigh your daily food waste.

Method

- 1. Take a large bowl, for example: a mixing bowl.
- 2. Place on a weighing scale and make a note of the bowl weight here:

grams

- 3. Place all your food waste in this bowl throughout the day (you may wish to ask your parent / guardian to help whilst you're at school).
- 4. At the end of the day, weigh the bowl of food waste and make a note of this **total weight** (in grams).
- 5. Subtract the weight of the bowl (noted in point 2) from the **total weight** to give you the weight of the food waste (in grams) and enter your result into the chart below.
- 6. Dispose of your food waste according to your local waste disposal guidelines.
- 7. Repeat method for 7 days.

DAY	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Waste Weight (in grams):							

Once you have completed the waste weigh in for 1 week, add all the food waste weight results for each of the 7 days together and enter the total below.

Week waste total (in grams) = _____ g

Can you convert your result from grams to kilograms?



Can you repeat this for another week and reduce your waste total?





Declaration of mission completion



I,
can certify that
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