

Plastic Patrol

by Rebecca Tripp and Tom McConnell www.conservationtales.com/seaturtles



Sea turtles are beautiful animals that need our help! Many species of sea turtles are endangered, and most of the rest are threatened. Some of the threats to the survival of these species is caused by humans. Sea turtles suffer injuries when they are hit by boats, and the beaches they need for laying eggs have been disturbed by development and human activity.

But another major threat is the trash people put in the oceans. Used fishing gear, plastic bags, 6-pack holders, plastic straws and bottles, and many other types of trash have been found in the stomachs of sick and injured sea turtles. Sometimes these pieces of trash kill the sea turtles that eat them because they look like a sea turtle's natural food.

Even in you live far from the ocean, you can make a difference. Much of the plastic trash we throw away end up in rivers and streams that carry the trash to the ocean. If we reduce the amount of plastic we throw away, we can help protect sea turtles around the world. In this inquiry, you will collect data about the trash you produce and explore ways to reduce your plastic use.

Driving Questions: How much plastic trash do you produce in a week?

And where does that trash go?

Objectives:

- I can measure the amount of plastic trash I (or my class) produce in a week.
- I can identify where my plastic trash ends up and its impact on wildlife.
- I can discuss ways to reduce my plastic use and try some of the strategies I learn about.

Link – Use this link in the first part of this lesson.

(https://secure.greenpeace.org.uk/page/content/plastics-calculator)

Prediction: In this box, write your Prediction:

How many pounds or kilograms of plastic trash do you think you produce in a week?

Find Your Plastic Footprint

People use a lot of plastic! Many of the things we buy or use come in plastic bags, bottles, wrappers and boxes. Sometimes that trash ends up in a river or stream in your community, and it can find its way to the ocean. Before you can think about reducing your plastic footprint, you should know how much plastic trash you make.



STEP 1: Plastics Calculator

Go to the Plastics Calculator website at ...

https://secure.greenpeace.org.uk/page/content/plastics-calculator.

Enter your first name, and answer the questions presented to you. At the end of the questions, you will see how much plastic you throw away in a year!

Write the number of items you throw away in a year in this space!

STEP 2: Measuring Your Plastic Footprint

The Plastics Calculator may not include all the plastics you use, and it is an estimate. In this step, you will find the weight of the plastics you actually throw away in a week! You can do this at home for yourself or your family, or you can do this will your class at school.

For one week, collect the plastic trash you would throw away in a bucket or trash can. Each day, weigh the plastic trash you collected, and record the weight in the table on page 3. Remember to subtract the weight of the container you weigh your trash in.

After you have weighed your plastic trash each day for a week, find the total for the week. You can also find out how much plastic trash you make in a year by multiplying this number by 52. (52 weeks in a year!)

How much plastic did you throw away in a week?	How much in a year??

Compare the number you measured to the Plastics Calculator number above.

Data Table: Plastic Trash I Throw Away in a Week

		Total Weight of trash +	Weight of empty	Weight of trash (total -
Date	# of items	container	container	container)
			Total Weight	
	36 1.1 1 1	1.6 4 11 50	for 1 week	
		ht for 1 week by 52	Total trash in	
	to find tota	l for 1 year.	1 year	

Noticing Patterns and Making Inferences

1.	Compare your data to your classmates or another class at school. How do your results
	differ from other people's results?

2	TT. 1 1			41. 1. 1. 41. 44. 1. 2
/.	How do your results com	nare to volir predictio	ins / winv an voi	i think that is a
	now do your results com	pare to your prediction	mo villy do you	a cilillia cilac ioi

3. Are there certain kinds of plastics you throw away a lot more than others?

From Understanding to Action!

Now that you have a better understanding of how much plastic trash you make, you can start thinking of ways to reduce the amount of plastics you use!

Return to the Plastics Calculator website and go to the section at the end that gives suggestions for ways to reduce your plastic footprint. You can also view the poster on page 5 for some ideas, or search other websites for ways to reduce your plastic use.

1.	List some ways you can use less plastic?
2.	Which of those ideas do you think you could try right away?
3.	Are there ideas you found that would NOT work for you? Why?
4.	Why is it important to use less plastic? (You may want to read Conservation Tales: Sea Turtles" to get some ideas.)
5.	Discuss ways to share what you have learned with your community. How might you convince others to also find ways to reduce plastic use?

