



Plastic Waste Visualisation Project

This activity is *not* about casting blame for plastic pollution. Rather, it is designed to help students understand and visualise the amount of plastic waste each of us typically produces every year.

Ask your students to guess how much rubbish an average British person produces each year? Then reveal and discuss the following statistics:

- The average household waste volume is 394 kg per person in the UK.
- What is the average weight of a student in the class? Approximate the total body weight of the class. How does this compare to the class's total average annual waste volume? E.g. how many multiples of the class is created in waste each year?
- Whilst 75% is recyclable, only about 40% reaches a recycling plant.
- If we continue at present rates, it is thought there'll be more plastic in the oceans of the world than fish by the year 2050.
- The biggest problem is that much of our waste (especially plastic), takes years, decades or even longer to break down.
- Rubbish, especially plastic waste, can be very hazardous for wildlife and millions of animals die needlessly each year from choking on ingested rubbish (especially plastic). Additionally, many pieces of trash may look harmless to us, but may be death-traps to small animals (e.g. discarded plastic bottles which small animals can easily enter but can't escape from).





Your students are continually exposed to statistics about plastic waste and have probably already heard the figures on the previous page. Help them actually understand these numbers in the following, fun activities!

In the Great British Water Project box, you will find 15 recyclable net bags. Each of these bags can contain approximately 35 litres of plastic water bottles.

Follow the steps below:

Step 1: Place the net bags close to a rubbish bin in your classroom or (better) your canteen or cafeteria.

Step 2: Ask your students to place all plastic bottles into the net bags instead of the rubbish bin. Wash each bottle before putting it in the bags. Instruct your students to place all other rubbish into the bin as usual (to avoid unclean waste being collected). You could give a few net bags to different classes to see how they compare!

Step 3: How many bottles have you collected in the net bags after one week? Two weeks? Three weeks? If each net bag has a volume of roughly 35 litres, what is the total volume of the plastic bottles you collected? What is the average amount of bottles produced by each student each week? Estimate your school's total weekly volume of plastic waste. Please do send photos and a summary of your findings to water@hansonbox.org - we'd love to know what you discover!

As a class, discuss the ways in which plastic waste can be reduced? Can the students think of alternatives to single use plastics? Discuss situations where plastics, even for bottled water, are useful and can save lives (e.g. natural disaster relief, epidemics etc.)? What balance should be struck concerning the use of single use plastics?

Discuss the three AQUAPHOR filter jugs in the Great British Water Project box (used for the blind taste test activity). Each of the filter cartridges purifies approximately 350 litres of water, avoiding the use of 350 one litre single use plastic bottles! That is ten net bags full of plastic! How can this plastic waste be recycled? Will this be expensive?

How did the filtered tap water compare to tap water and bottled mineral water in the results of your blind taste test? Could we avoid all that plastic waste by filtering water? What other sensible ways could we utilise to reduce the amount of plastic rubbish we produce?

Do your students think the average household waste volume will change from 394 kg per person over the coming years? If so, will this number rise or fall?

Plastic Artwork Competition

After you have completed the visualising plastic waste discussions, in the spirit of recycling, use the plastic bottles you have collected in the net bags to take part in our plastic artwork competition. Can you turn the waste plastic bottles beautiful sculptures, abstract art or decorations? We have £1,000 in prizes - see enclosed flyer!

City To Sea and World Refill Day

Visit the website of our partner, City to Sea (www.citytosea.org.uk) to learn more about reducing single-use plastic waste and take part in World Refill Day on 16th June, 2021!

Note: by participating in the Great British Water Project activities and submitting photographs to the Hanson Box team, you are consenting to allow us publicly to display the photographs you send, on our website (see www.hansonbox.org/water).