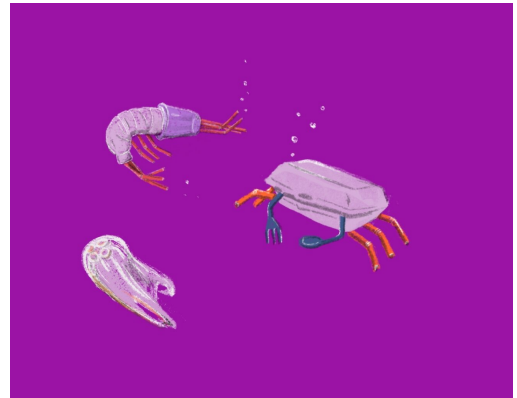


Plastic, not so fantastic:

What makes one country a bigger plastic waste generator than others?

Background

In 2015, over 381 million tonnes of plastic were produced globally. That is equivalent to the mass of two-thirds of the world population! Take a look around and see how many plastic items you can find. All of those water bottles, straws, and plastic grocery bags add up and their waste is making a large negative impact on our oceans and wildlife.



While this is a global issue, some countries produce more waste than others. Which countries do you think produce the most waste, and why? Check out this dataset to see the reality of global plastic waste.

Dataset

[This dataset](#) describes the plastic waste generation rate per person versus gross domestic product (GDP) per capita based on purchasing power parity (PPP). Gross domestic product per capita is the value of all final goods and services produced within a country in a given year divided by its population. Purchasing power parity adjusts for differences in cost of living and inflation rates between different countries. Effectively, GDP PPP is a conversion to international dollars that allows for easy comparison of global economies.

Variables

Country - this categorical variable describes the country studied

Country (abbreviated) - this categorical variable abbreviates the description of the country studied.

Plastic Waste (kg/person/day) - this numeric variable averages how much plastic is used per person per day, in units of kilograms.

GDP PPP (\$1000) - this numeric variable describes the gross domestic product per based on purchasing power parity. It is a number that tries to allow for comparisons between each country.

Total Population (millions) - this value is the total number of persons who live in a country. It is in the unit of millions of people.

Activity

Below are two claims that can be used to answer the main question, “What makes one country a bigger plastic waste generator than others?” To use CER to answer this question we must make a claim, support this claim with data and finally reason or explain why the data counts as evidence.



Claim 1: More productive economies produce more plastic waste (per capita) than less productive economies.

Claim 2: Countries with large populations do not produce less plastic waste per person.

Create a graph to serve as evidence for each claim. Use the camera icon (upper right corner of DataClassroom graphs) to copy and paste the graphs into this CER template (in the evidence box) and reason why and how the evidence supports each claim.

Claim: A statement that aims to answer the original question.

Evidence: Scientific data to support the claim.

Reasoning: Justification that connects the evidence to the claim.

Claim	Claim
More productive economies produce more plastic waste (per capita) than less productive economies.	Countries with large populations do not produce less plastic waste per person.
Evidence	Evidence

<i>Paste graph from DataClassroom here.</i>	<i>Paste graph from DataClassroom here.</i>
Reasoning	Reasoning
<i>Justify why this data supports the claim.</i>	<i>Justify why this data supports the claim.</i>