

SfS Away from the Classroom!

E10: Plastic in the Ocean (Recommended for Grades 3-8)

Please use the following resources to learn about the problem of plastic in our oceans.

Watch this Video: https://www.pbs.org/video/how-much-plastic-is-in-the-ocean-jpfpsf/

Answer these questions:

- What size is most of the plastic found in the ocean?
- Where do plastic particles tend to collect in the ocean? Why do they gather there?
- Where (how deep) in the ocean can we find plastic bits?
- Who is hurt when the ocean fills up with plastic? How?

Activity: Follow these directions to understand how gyres of plastic trash form in the ocean and why getting rid of them is a big engineering challenge.

You will need:

Bathtub (or large bowl)	 Scissors 	 Strainer (optional)
 Slotted Spoon 	Water	 Food coloring (optional)
Plastic bag		

- 1. Cut the plastic bag into tiny pieces. As small as you can make them.
- 2. Fill the bathtub (or large bowl) with water. You need about 4 inches
- 3. Add a little food coloring to the water to make the plastic bits easier to see.
- 4. Put all the plastic pieces you cut up into the water and observe what happens to them.
 - a. Where do they end up? Floating? Sinking? Both?
- 5. Put your hand in the water and make a circular motion gently around the edge of the bowl 10 times and observe where the plastic is now.
- 6. Use the slotted spoon to try to separate the plastic from the water.
- 7. Use the strainer to try to separate the plastic from the water.
- 8. Make sure to put all the little pieces of plastic in your recycling bin.

Make observations & use Claims, Evidence, and Reasoning!

- 1. **Claim**: A circulating current gets filled with plastic bits.
 - Evidence:
 - Reasoning:
- 2. **Claim**: A net/strainer couldn't collect all of the plastic in the water.
 - Evidence:
 - Reasoning:





