

Sitka Sprouts

Activity Packet

Theme: Marine Debris

Books Recommendations:

- Watch Over Our Water – Lisa Bullard
- Tracking Trash – Loree Griffin Burns
- 10 Little Rubber Ducks – Eric Carle
- Saving Tally – Serena Lane Ferrari
- What a Waste – Jess French
- Plastian The Little Fish – Nicole Intemann
- A Planet Full of Plastic – Neal Layton
- Plastic Ahoy! – Patricia Newman
- Let's Investigate Plastic Pollution – Ruth Owen
- One Plastic Bag – Miranda Paul



Video Links:

- Ducks Overboard: <https://www.youtube.com/watch?v=fjxLIMF2Fqo>
- 10 Little Rubber Ducks Story: <https://www.youtube.com/watch?v=fCpNRTb5tOQ>
- How Plastic Hurts the World: <https://www.youtube.com/watch?v=VUUUxOl715s>
- What is Plastic Pollution? https://www.youtube.com/watch?v=ODni_Bey154

Web Links:

- Bottle Cap Art: <https://www.momsandcrafters.com/bottle-cap-crafts/>

What is Marine Debris?

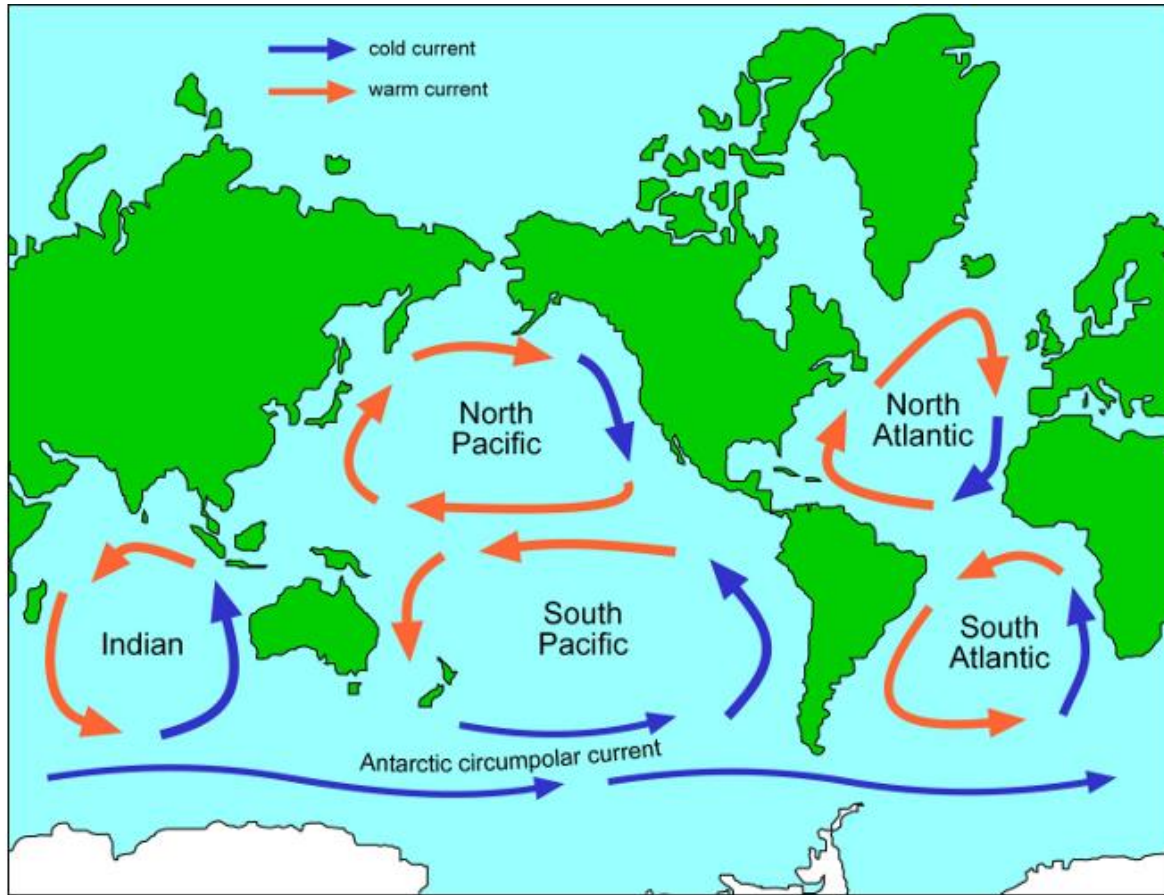
Marine debris is any form of litter that ends up in oceans, seas, or other large bodies of water. Any kind of trash can become marine debris – from glass bottles to aluminum cans to medical waste – however the majority of marine debris is plastic.

The problem with plastic is that it never fully goes away, but instead it breaks down into smaller and smaller pieces known as **microplastics**, which can then be eaten by many different ocean animals from the tiniest plankton to humpback whales. When animals eat microplastics they feel full even though they don't actually have any food or nutrients in their stomachs, putting them at risk of malnutrition and starvation.

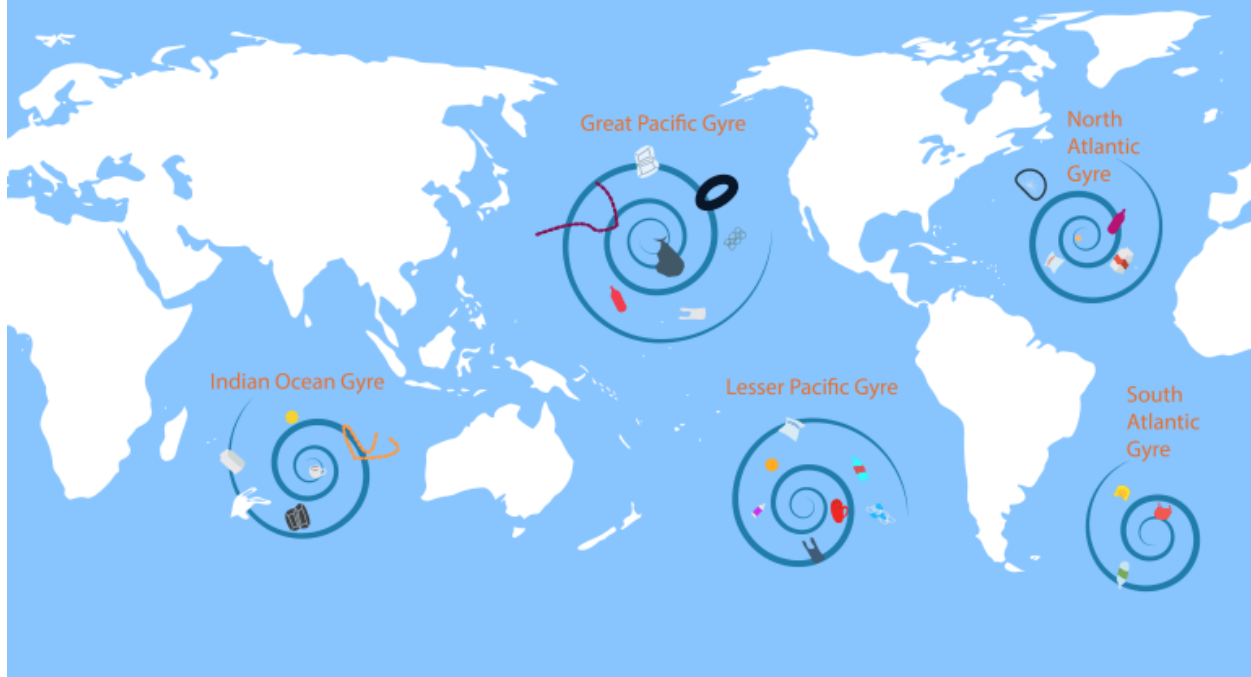
Marine debris tends to collect in areas called **ocean gyres**. A gyre is a circular ocean current formed by Earth's wind patterns and rotation. The circular motion of the gyre draws in debris and as garbage gets to the center of the gyre it becomes trapped, creating what scientists call "**garbage patches**".

No one knows exactly how much marine debris is in the oceans – ocean gyres are too vast to gather all the debris. We can all help prevent the marine debris problem from getting worse by making small, simple changes to our lives. Even things like bringing reusable bags to the store or using bamboo utensils instead of plastic can make a big difference!

Ocean Gyre Diagram



Ocean Gyres of the World



Float your Boat

Materials:

- Recycled materials
 - Wine corks, bottle caps, yogurt lids, popsicle sticks, etc.
- Glue, tape, or rubber bands
- Paper

Instructions:

- Use recycled materials to build a boat that will float in a current.
 - Use tape, glue or rubber bands to secure your materials together.
- Test your boat in your bathtub or a nearby creek!



Pull the Plastic

Materials:

- Plastic tub, bowl, or Tupperware container
- Plastic debris (bottle caps, food wrappers, etc)
- Ping pong balls, golf balls (or other materials that will float and sink)
- Strainer, tweezers, or spoon
- Mini ocean creatures (optional, but make it more fun!)

Instructions:

- Fill a tub, bowl, or Tupperware container with water.
- Add your plastic debris and ocean critters.
- Use the strainer, tweezers, or spoon to collect all of the plastic debris out of the ocean before the animals get entangled!

The infographic is divided into two main sections. The left section has a light green background and contains text about entanglement, silhouettes of a bird and a turtle with plastic debris around them, and text about entanglement reports. The right section has a light grey background and contains text about plastic bag ingestion, a silhouette of a turtle with a plastic bag in its mouth, and the NOAA Marine Debris Program logo.

From reports in the United States, at least **115** marine species are impacted by entanglement, including mammals, turtles, birds, fish and crabs. World wide, the number tops **200**.

Most entanglement reports in the United States involve northern fur seals, Hawaiian monk seals, and sea turtles.

Plastic bags are the most commonly ingested type of debris amongst sea turtles.

NOAA
Marine Debris Program
www.MarineDebris.noaa.gov

Bottle Cap Ocean Art

Materials:

- Piece of paper (blue is ideal, but any color will work)
- Bottle caps
- Plastic bags (the green Seamart ones make great kelp!) or green tissue paper
- Paint
- Colored pencils, markers, crayons
- Glue
- Googly eyes (or you can draw your own eyes)

Instructions:

- Start with a piece of paper.
- Cut strips of green plastic grocery bags to make kelp and glue or tape onto your paper.
- Glue bottle caps onto your paper and decorate to look like fish.
 - Add googly eyes or draw your own and make scales with paint or markers.
- Cut paper triangles and glue to your fish to make a tail.
- Add any other sea creatures to your picture!



Marine Debris Cleanup

Materials:

- Garbage bag
- Gloves
- Beach cleanup recording sheet

Instructions:

- It's your turn to venture out on your own beach clean-up!
- Put on some gloves, grab a trash bag, and use the recording sheet to keep track of what you are finding.

