

Grades: K-3rd



The Water Bottle Game!

Subject: Environmental Science

Objective: Teach about recycling with emphasis on plastic's harmful effects to the environment.

Materials: 3 empty water bottles.

Activity: Hot potato- water bottle style! Explain to kids how plastic can harm animals. Assign each kid a title: turtle, bird, or fish. Divide class into groups of sea turtles, birds, and fish and sit down in a circle facing each other. They'll play hot potato with an empty plastic water bottle, replacing the words "hot potato" with "plastic bottle." Whoever gets the plastic bottle is "out" because they (the animals) were injured by the water bottle. After 5 minutes ask everybody who got "out" to stand up. Explain that these birds, fish, and turtles were hurt by the water bottles, and use this time to ask the class where these animals are usually found, and how they think the water bottles ended up where the animals could get them. Discuss that most come from the land from people littering and that over half of the litter is plastic. Ask students what other kinds of things could be considered "litter" or bad for the environment. Ask if anybody has any ideas how to help. Explain that recycling, using reusable water bottles, and beach clean ups can protect the environment. Finally, end the lesson by having the kids still holding water bottles place them in the recycling bin.



Marine Debris: About Me!



What is marine debris?

People who enjoy building sandcastles and other fun activities at the beach may have noticed trash or strange objects on the shore like empty food containers or a lonely flip flop. Trash and forgotten objects like these that are found in bodies of water such as rivers, lakes, and oceans are called **marine debris**.

Over half of marine debris is plastic, and according to National Geographic, the ocean contains over 5.25 trillion pieces of plastic. This means there are many more pieces of plastic in the ocean than there are stars in the Milky Way Galaxy.

Where does it come from?

About 80% of marine debris comes from land sources such as beach litter and items that get carried away by wind, rain, and natural disasters. The rest comes from the ocean, commonly taking the form of fishing lines, nets, and trash from boats. Birds, fish, and turtles are just a few of the animals that are impacted by marine debris by mistaking the trash for food or getting tangled and trapped in the debris. Not only does marine debris threaten and damage local wildlife and their habitats, but it can harm human health as well. Actions need to be taken to create healthy oceans, wildlife, and people.

How to help

Limiting the amount of plastic we use by using reusable items instead of single-use items like plastic water bottles, decreases the amount of trash that ends up in the ocean. Reusable water bottles, metal straws, and reusable grocery bags are all environmentally friendly alternatives to single-use plastic items.

Recycling is a great way of keeping the trash away! Items can be recycled by placing them in a recycling bin instead of throwing them in the trash; they can also be recycled by using creativity to turn an old item into something new, like making a water bottle bird feeder. By joining a local beach cleanup or marine debris survey, people can remove plastic from shorelines, protect wildlife, and connect with friends and family outdoors!