Ahoy matey! It’s the Ocean Blue Crew from the Clearwater Marine Aquarium here to give you some nautical knowledge about our incredible ocean. To kick off the new year and the new decade, we want to talk about a big problem we’ve been seeing in all of the world’s waters — trash. It’s thought that there is around 5,250,000,000,000 (5.25 trillion) pieces of plastic trash in the world’s oceans. This plastic pollution can affect every living thing. In this issue, the Ocean Blue Crew will talk with you about CMA’s Trash to Toys contest, what happens to trash, and how you can help prevent more trash ending up in the ocean.

Introduction

Scientists have done a lot of research to learn more about how dolphins see, and I want to share this information to help you make the best toys possible. Dolphins have great eyesight both above and below the water, so no matter if your toy is shown poolside or at the underwater viewing windows, your toys will be seen! It has been found that dolphins are colorblind, but they can see greyscale or contrast. What this means is dolphins can see the differences between colors. Black and white have the greatest contrast. To get creative with your toy you can make your toys as brightly colored as you like or use animal shapes. Our dolphins also seem to prefer moving pieces.

Some other helpful hints from our education staff and animal care providers include not making your toy too big so that it can move around easily. They also recommend doing a strong shake test to make sure everything is attached nice and tight. If your toy does not pass our final shake test, it will not make it to the final round. Please remember that your toy must be made out of recycled materials.

To participate in trash to toys, teachers must follow instructions on the trash to toys flyer and submit an intent to participate by Monday, March 23, 2020. Trash to Toys submissions start February 17, 2020 and the last day to drop them off is April 13, 2020 by making arrangements with the Manager of Education Programs. The winning toy will be announced on Earth Day (April 22nd). The winning class will receive a free off-site program in your class during the month of May 2020. For more information, go to our website SeeWinter.com.

Start brainstorming! We cannot wait to see your awesome toys here at CMA. Observation Otter will now talk with you about why it is important to reuse and recycle.

You Will Need:
- A Planter or Container
- Soil
- A Piece of Paper Crumpled Up (Recycled is best)
- A Plastic Lid
- A Banana Peel (Any other fruit waste like an apple core will also work)
- Optional: Water

Directions:
1. Fill the container with soil to make your landfill. Bury the paper, plastic lid, and banana peel in the soil so that they are all evenly covered. These are your trash items in the landfill.
2. Bring your container outside where it will be affected by the elements (eg. direct sun, rain, and low temperatures). If it does not rain, water the container.
3. Ideally, leave it outside for about a week. The longer it is outside, the better you will see the effects of the experiment.
4. When the time is up, carefully dig up your trash items. What happened to each one? Why is it important to recycle plastic?

Both the paper and the banana peel are biodegradable and if you left them in your landfill for long enough, they would break down into natural material like soil. The plastic is not made of natural materials and can take hundreds of years to break down. As the plastics break down, it will become smaller pieces of plastic called microplastic. This is why we want to reduce the amount of plastic that goes to landfills by recycling plastics, or choosing to refuse the use of plastics.
You Will Need:
• 3 C Bread Crusts or about 3 handfuls (stale crusts are best)
• 1 Tbsp. Butter, melted
• 1 ½ Tbsp. Sugar
• 1 Tbsp. Sugar, separate
• ½ tsp Cinnamon
• An Adult

Directions:
1. With adult supervision, preheat the oven to 350° F.
2. Cut the crusts into 1½ inch pieces and place into a large bowl.
3. Drizzle the crusts with the melted butter and toss with your hand or tongs to distribute it as evenly as possible.
4. Sprinkle the crusts with the cinnamon and 1½ Tbsp. of sugar. Mix through evenly.
5. Spread crusts over the baking sheet in a flat layer.
6. Bake for 5-8 minutes or until golden brown and crunchy.
7. While hot, sprinkle the extra 1 Tbsp. of sugar over top.