Plastic Pollution Pathways

27 – Plastic Mosaics

LOMP
Lake Ontario MicroPlastics Center

University of Rochester
RIT Rochester Institute of Technology

Objectives

Participants will…

- assemble mosaics with plastic waste from their community.
- examine plastic waste to hypothesize about possible sources.
- illustrate the connection between plastic in the environment and everyday plastic waste.

Background

Microplastics have been found in water, air, plants, food, animals, and even humans. Scientists are measuring the amount and types of microplastics in the environment and organisms to gain a better understanding of how widespread they are and how living things, including humans, may be exposed.

While we know that microplastics are in our air, water, and food and can get into our bodies, we still know very little about their effects on the environment and health. Learning about the most common types of microplastics in the environment helps to guide this research by informing experiments in the laboratory and the field.

By making art from found plastic, participants can illustrate the connection between plastic in the environment and the plastic they interact with daily.

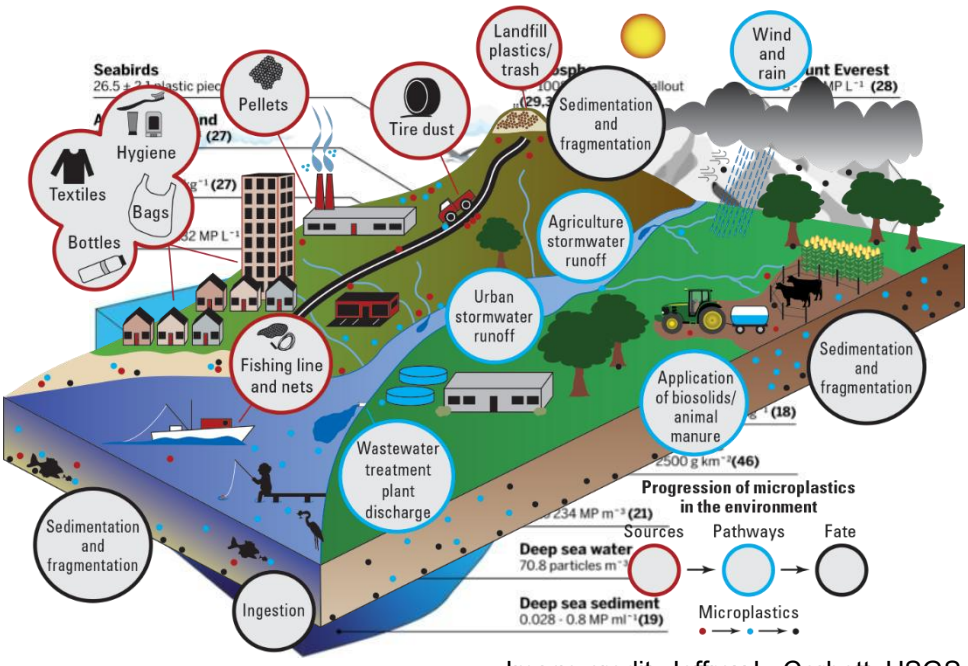


Image credit: Jeffrey L. Corbett, USGS

Materials

- Paper plates (1 per participant)
- Natural white air-dry clay
- Cookie cutters in the shapes of animals, plants, food, people or other natural shapes (e.g., clouds)
- Mod Podge
- Foam brushes or paintbrushes (to apply the Mod Podge)
- A selection of small pieces of plastic. You can collect them with the following activities or collect plastic waste from your location.
    - Plastic Pollution Pathways 2 – Everyday Plastics
    - Plastic Pollution Pathways 16 – Litter Clean-up for Education
    - Plastic Pollution Pathways 26 – Sand Sieving
- *Optional:* Dowels, skewers, forks, or other tools for poking holes or making patterns on the clay. Strings to make them into ornaments.

Safety Considerations

- Be careful with small pieces if you are working with young children.
- Be sure participants wash their hands after handling trash.

Adaptations for People with Disabilities

- Participants with visual impairments can feel the different pieces of debris.
- Participants with hearing impairments should be able to do this activity without any modifications other than those necessary for communicating the instructions.

Procedure

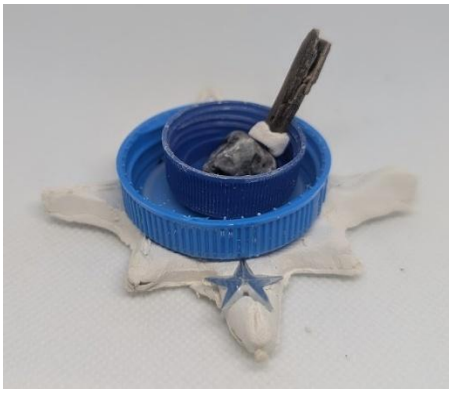
1. Give each participant a small ball of clay on a paper plate and have them select a cookie cutter. Facilitate discussion about why they chose the cookie cutter they did. Are microplastics found in the thing your cookie cutter represents? How might they have gotten there?

2. Flatten the clay and cut out the shape with a cookie cutter. *Optional:* If making an ornament, poke a hole in the clay now.

3. Decorate the clay shape with plastic pieces. Firmly pushing the plastic pieces into the clay will help secure them. While participants are selecting plastic pieces, facilitate discussion about the source of the plastic. Can participants guess from the material, color, texture, etc. what it might have come from? What is something they can do to prevent plastic waste from ending up in the environment?

4. Leave the clay out to dry. Ask participants to reflect on what the possible impact of microplastics could be on the thing represented by their cookie cutter.

5. After the clay is dry, coat it with Mod Podge to help keep the plastic pieces from detaching. *Optional:* if making an ornament, add a string once the clay is fully dry.



Citations & Funding

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Find more Plastic Pollution Pathways lessons at rit.edu/plasticpollution/education.