

# MICROPLASTICS

**Microplastic means “very small” plastic.**

Fragments of plastic that are \_\_\_\_\_ mm (or \_\_\_\_\_ of an inch) in length or smaller are referred to as microplastics.

## Sources of Microplastics



**Plastic Trash**



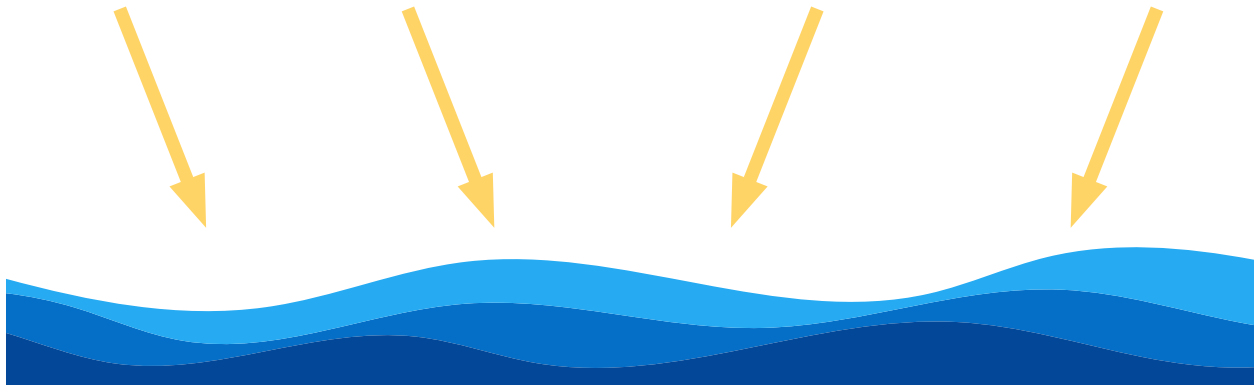
**Clothes**



**Hygiene Products**



**Nurdles**



There are several sources of microplastics that end up in our municipal water sources, local rivers and lakes, and ultimately, the ocean.

Large plastic trash floating in water is weakened by \_\_\_\_\_ and broken down over time by \_\_\_\_\_ into plastic pieces 5mm or smaller. The results of this degradation process are called **secondary microplastics**.

**Primary microplastics** are plastic items that are already 5mm or smaller. These include the clothing fibers, microbeads, and nurdles.

|   |       |
|---|-------|
| <b>Research:</b> What are <b>microbeads</b> ? What are they used for? |       |
| Information Source  | Notes |
| Information Source  | Notes |
| <b>Research:</b> What are <b>nurdles</b> ? What are they used for?    |       |
| Information Source  | Notes |
| Information Source  | Notes |

## Understanding the Extent of Plastic Pollution

1. Read through this [Earth Day fact sheet on single-use plastics](#). What fact surprises you most?

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2. Read through this [Earth Day fact sheet on plastic waste](#). Summarize the current state of plastic pollution of oceans.

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## Harmful Effects of Plastic & Microplastics

Using the chart below, you will research a few issues caused by plastic pollution of water sources. You have been provided one information source to begin.

| Issue  | Research Notes  |                   |
|--|---|-------------------|
| Animals accidentally eat plastic trash floating in water.                                      | <b>Source #1:</b> <a href="#"><i>Bite Size Plastic: How Marine Wildlife Snack on Our Trash</i></a> by the National Oceanic and Atmospheric Administration                 | <b>Source #2:</b> |
| Microplastics or larger plastic entangled in coral reefs affect its normal internal processes. | <b>Source #1:</b> <a href="#"><i>Tiny Plastics, Big Threat: How are Microplastics Impacting our Coral Reefs?</i></a> By the United States Environmental Protection Agency | <b>Source #2:</b> |

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|   |  |                          |
|---|--|--------------------------|
| <p>Microplastics are consumed at the lowest levels of food webs and continually ingested by organisms at higher levels.</p> | <p><b>Source 1:</b> <a href="#"><i>Plastics and Plankton in Our Seas</i></a> by <i>Frontiers for Young Minds</i></p> | <p><b>Source #2:</b></p> |
|---|--|--------------------------|

**Suggested Reading:** [Microplastics: Trouble in the Food Chain](#) by the United Nations Environment Program.

## What Can We Do?

While learning of the effects of plastic pollution and microplastic, many of the information sources also shared some ways we can make positive change. Share a few of these suggestions below.

[illegible]