

# Microplastic Resources for Educators





# What Are Microplastics?

Microplastics are plastic particles that are greater than 1 nanometer (nm) and less than 5 millimeters (smaller than a strand of DNA and up to the diameter of a straw). This definition includes nanoplastics, which range from 1 nm to 1,000 nm.

## Why Do We Care about Microplastics?

Effects on human health are not well understood. Scientists are researching microplastics and their effects on the environment and human health. Microplastics have been found in the air we breathe, the water we drink, and the food we eat. They pose a potential risk to humans and wildlife through exposure to the chemicals in plastic and through physical effects. Learn more at https://mp-1.itrcweb.org/human-health-andecological-effects/#4\_5.

#### How Are Humans Exposed?

Humans may consume microplastics from many different sources—in products such as toothpaste that contain microbeads; in drinks stored in plastic bottles; in food that is packaged, stored, and microwaved in plastic; and in water from community water supplies or private wells.

#### Let's Learn Together!

The science surrounding microplastics is new and rapidly evolving. As a result, we are all working to better understand microplastics even scientists and regulators. Addressing microplastics requires collaboration between the scientific community, decision makers, and the general public. Learn more at https://mp-1.itrcweb.org.

### Ideas for K-12 Student Curricula

ITRC has compiled a list of curricula, lesson plans, activities, videos, coloring books, and handouts that teachers can use to educate their students about plastics and microplastics. The list can be found at <u>https://mp-toolkit.itrcweb.org/wp-</u> <u>content/uploads/2024/05/23-K12-Resources-</u> <u>for-Educators.xlsx</u>.

Here are a few tips for looking for additional sources or for creating your own activity: 1. Use reputable resources such as a college/university or government website. Typically, their educational materials are free

and not copyrighted. 2. Use age-appropriate language and examples.

**3. Try to incorporate graphics and hands-on activities.** 

The **Interstate Technology and Regulatory Council** (ITRC) is a state-led environmental coalition devoted to creating innovative solutions, best management practices, documents, and trainings to foster technical knowledge and quality regulatory decision-making to protect human health and the environment. Visit <u>Home - ITRC (itrcweb.org)</u>.

