

# All About Plastics

Eco360 Jr.  
Activity  
Grade Level: 3-8



## Main Objectives

Learners will explore all about plastics, including when they were created and how they are used in our daily lives.

## Learning Outcomes

By the end of this activity, learners will:

- Understand plastics, their history and their application in life
- Describe the life cycle of plastics
- Understand how much plastic waste ends up in the environment

## Length of Activity: 2 hours

**Step 1+2:** Intro to plastics and find alternatives to using plastic water bottles

**Step 3+4:** Learn about the life cycle of a plastic water bottle

## Materials Required

- Computer or internet-enabled device
- Book: The Adventures of a Plastic Bottle by Allison Inches
- Learner Worksheet

## Activity

### Step 1: Watch a video about the history of plastics

As a class, watch the following video, A brief history of plastics:



Discuss the question below after watching the video (15 min):

1. What sparked the need for plastic in the 1800s?
2. What is plastic made of?
3. Why did plastic production become so successful?

### Step 2: Compare plastics to other materials with a Jigsaw Activity

In preparation for the Jigsaw activity discuss the different types of materials that would be a good alternative to a plastic water bottle (for example aluminum, glass, etc.).

Divide the class into even groups and distribute the accompanying worksheets (one for each group). Assign each group a different alternative from the discussion and have each group create a pro/con list for each one. For example, a pro for glass is it can be recycled, but a con is that it is breakable. Then have each group present their findings. Once everyone has presented, vote for which one is the best and discuss why (recyclability, unbreakable, keeps liquids cooler, etc.).

### Step 3: Learn about the life cycle of a plastic bottle

#### Grades 3-5

Read the book *The Adventures of a Plastic Bottle* by Allison Inches or watch the read-aloud:



Answer the following questions as a class (5 min).

1. What happened at the beginning? The middle? The end?
2. What did the bottle end up as?

## Grades 6-8

Watch the video Life of a Plastic Bottle:

 <https://www.youtube.com/watch?v=erGnf7ws20E> (2:40 min)

Answer the following questions as a class (5 min):

1. Where do plastic bottles come from? How are they made?
2. What happens to them when they are recycled?
3. What can happen to them if they are not recycled?

### Step 4: Track a plastic bottle from the when it's thrown away

What are the paths a plastic bottle can take? If you throw away a plastic bottle, where could it end up? Individually, in pairs or as a class on your projector track a plastic bottle from your location using the link below. (10 min)

 <https://theoceancleanup.com/plastic-tracker/> (10 min)

What do you think really happens when you throw plastic away? Discuss as a class and then watch the video:

 <https://www.youtube.com/watch?v=6xINyWPPb8> (4:06 min)

After watching the video, discuss as a class (10 min):

1. What did you learn?
2. What surprised you the most?