

How Plastic Waste Harms the Environment

Eco360 Jr.

Activity

Grade Level: 3-8



Main Objectives

Learners will explore how plastic waste harms the environment by exploring its effects on land, water and air.

Learning Outcomes

By the end of this activity, learners will:

- Describe the amount of plastic waste currently found in the environment
- Identify the areas of environment most impacted by plastic waste
- Describe how plastic waste affects the land, air, and water bodies

Length of Activity: 2.5 hours

Step 1: Intro to microfibres

Step 2: Case study about diverting clothing from the landfill

Step 3:

- **Grades 3-5:** Clothing repair/swap
- **Grades 6-8:** Research about sustainability in the consumer market

Materials Required

- Internet-enabled device
- Topic backgrounder

Activity

Step 1: Watch a video

As a class, watch the video The Story of Microfibres:



After watching The Story of Microfibres discuss as a class and try to answer the following questions:

1. Where do plastic microfibres come from?
2. How do microfibres end up in our water?
3. What can clothing companies do to stop microfibres pollution?
4. When shopping, what can we look for in our clothing choices?

Step 2: Case study

As a class, watch the video about Blenderz in Edmonton, Alberta. (15 min)

Blenderz is an organization that aims to reduce clothing waste by re-selling or re-purposing used clothing.



From the case study, answer the following questions as a class: (10 min)

1. What are the 4 pillars for total recycling?
2. What can I do to make sure my clothing doesn't end up in a landfill? (Some ideas are to promote second hand stores, wash clothes less (spot clean), find municipalities that collect textiles, repair clothing, hand-me-downs, have a class clothing swap/repair shop.)
3. What kinds of fabrics do you think shed less plastic microfibres? (Tightly-wound, synthetic fabrics and organic fabrics made from cotton, wool and silk.)

Step 3: Take Action

Grades 6-8: Research Project (1.5 hours)

- Some companies aim to be more sustainable by creating clothing that sheds less microfibres. Some aim to be more sustainable by reducing waste. Some companies do both! Research a clothing company that makes clothing that sheds less microfibres OR a clothing company that aims to reduce textile waste.
- **Tip:** Google 'Sustainable Clothing Companies', etc. Explain how these companies are more sustainable and how the company reduces plastic microfibres in our environment?
- Find a brand's sustainability/ethics rating:



<https://goodonyou.eco/how-we-rate/>

Grades 3-5: Clothing Swap/Repair Ship (1.5 hours)

Instead of buying new clothes, wearing them until they don't fit or wear out and then throwing them away, you can swap or repair your clothes so that they don't end up in landfills. In landfills, clothing sheds microfibres that are washed away with the rain. The microfibres can then end up in rivers, lakes and oceans.

Whole class activity #1:

- Learn to sew a hole or button by watching the video below:



https://www.youtube.com/watch?v=n_452RcPiKA

- Learn how to sew a hole by watching the video below:



<https://www.youtube.com/watch?v=tkrc-V8sRIk>

Whole class activity #2 – Clothing Swap:

Bring in 2 or 3 clothing items that no longer fit (but are clean and still in good shape!). See if you can swap your items with someone else to find something new to wear.

Optional Extension Question (Grades 6-8)

What is “greenwashing”? Include some examples in your research project of companies that greenwash.

Educator background info about greenwashing:



<https://www.youtube.com/watch?v=isdTMuN4D-k>