



Activity

Macroplastics: a threat to wildlife

Biology - Module 1

1. Activity - The Ocean Cleanup Debate

In this activity, students will be asked to critically evaluate a proposed solution to ocean macroplastic pollution — the Ocean Cleanup. This is a non-profit organization that aims to rid the world's oceans of 90% of floating plastic pollution through advanced technology.¹ Despite its ambitious goals, the project has faced a variety of criticism, most prominently for failing to target the source of the ocean plastic pollution problem.² In this activity, students will evaluate the strengths and weaknesses of the Ocean Cleanup and make arguments in favor or against it.

The activity will take on a debate-style format. The students will be divided into two groups — one in favor of the Ocean Cleanup, and the other against it. Each group will be provided with a worksheet to help it prepare its arguments. There is also a list of online resources the students can use as a starting point for their research. The worksheets and list of resources can be found in the separate PowerPoint for the activity.

Students should be encouraged to include arguments that focus on wildlife and apply the concepts from the first module class, but they do not need to limit their arguments to these topics.

This is a proposed structure for the activity:

- 5 minutes - introduction of activity, division into groups
- 15 minutes - each group prepares its opening statement
- 6 minutes - opening statements (3 minutes per group)
- 8 minutes - each group prepares its rebuttal
- 4 minutes - rebuttals (2 minutes per group)
- 5-7 minutes - closing remarks

2. Worksheets

This is the worksheet each group will use to prepare its argument (here, it is just included as an example, but students should have access to a different powerpoint where these slides can be edited directly).

¹ The Ocean Cleanup. "The Largest Cleanup in History," 2021. <https://theoceancleanup.com/about/>.

² Becker, Rachel. "Why so Many of Us Wanted to Believe in an Ocean Cleanup System That Just Broke." The Verge, January 9, 2019. <https://www.theverge.com/2019/1/9/18175940/ocean-cleanup-breaks-plastic-pollution-silicon-valley-boyan-slat-wilson>.

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Stance

Main arguments

- 1.
- 2.
- 3.

Argument 1

Argument 2

Argument 3

Rebuttal notes

57

→ un-PLASTIC



1

Stance: In Favor of the Ocean Cleanup

Main arguments

- 1.
- 2.
- 3.

Argument 1

Argument 2

Argument 3

Rebuttal notes

58

→ un-PLASTIC



1

Stance: Against the Ocean Cleanup

Main arguments

- 1.
- 2.
- 3.

Argument 1

Argument 2

Argument 3

Rebuttal notes

59

→ un
PLASTIC

Group Division

Group 1 - In favor of the Ocean Cleanup

Group 2 - Against the Ocean Cleanup

60

→ un
PLASTIC