

## A CLEANER HABITAT CHALLENGE | TEACHER GUIDE



### Activity Overview:

In this challenge, students will be designing a cleaner habitat for Herman. When Piper visited Herman, she didn't even recognize him because he was wearing plastic for a shell! Herman's home, the beach, is full of plastic pollution. Students will design a pollution-free habitat for Herman and then will brainstorm ways we can work together to keep the beach clean!

**Prep Time:** 5 minutes

**Activity Duration:** 30-45 minutes



## STANDARDS ALIGNMENT

### Common Core

- *SL-4-5: Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.*

### Massachusetts Comprehensive Health

- *2.7.CE.1: Identify the impact of personal activities that contribute, positively or negatively, to the environment.*
- *2.7.CE.3: Identify strategies to minimize impact on the environment (e.g., reduce, reuse, recycle)*

## MATERIALS NEEDED

- "A Cleaner Habitat" Worksheet
- Writing materials
- Coloring materials



## BACKGROUND INFORMATION

Human-caused pollution, particularly plastic pollution, poses a significant threat to marine animals. This pollution has resulted in behavioral adaptations of hermit crabs. Plastic debris, ranging from microplastics to large floating objects, contaminates marine environments worldwide, presenting a myriad of hazards to marine life. Hermit crabs, known for their habit of utilizing discarded shells as mobile homes, often encounter plastic debris in their habitats. In areas heavily impacted by plastic pollution, hermit crabs may mistakenly use plastic fragments as shells, leading to malformations, injuries, and hindered mobility.

By recognizing the intricate links between human activities and the resilience of wildlife, we can strive towards a more harmonious coexistence with the natural world, ensuring the preservation of biodiversity and the integrity of ecosystems for generations to come.



## INSTRUCTIONS

1. Explain the activity to students. In this activity, they will be designing a cleaner habitat for Herman. They then will brainstorm ways to help keep the beach clean for Herman and his friends!
2. Each student will get a worksheet. When they design their habitats, they will need to include a shelter, food, and water for Herman. Students may need some guidance for this.
3. Give students around 30 minutes for their worksheet.
4. Completed worksheets can be displayed in the hallways to teach others about the problems hermit crabs are facing and how we can help them. They can then go home with students.



## A CLEANER HABITAT CHALLENGE | STUDENT GUIDE



I'm Herman! My habitat is being threatened by human-caused plastic pollution. A habitat is where my shelter, food, and water are! Can you help me clean up my habitat and protect it from becoming more polluted?



*Design a pollution-free habitat for Herman! Make sure to include his shelter, food, and water.*

*What can we do to reduce the pollution at the beach and in the ocean?*

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