

Empowering Youth Activism: Exploring Superfund Sites and Environmental Advocacy

Action Citizen Lesson

Compelling Question: What actions can youth take to protect the environment?	
<p>C3 Framework Indicators</p>	<p>MIDDLE SCHOOL</p> <ul style="list-style-type: none"> • D4.6.6-8: Draw on multiple disciplinary lenses to analyze how a specific problem can manifest itself at local, regional, and global levels over time, identifying its characteristics and causes, and the challenges and opportunities faced by those trying to address the problem. • D4.7.6-8: Assess their individual and collective capacities to take action to address local, regional, and global problems, taking into account a range of possible levers of power, strategies, and potential outcomes. <p>HIGH SCHOOL</p> <ul style="list-style-type: none"> • D4.6.9-12: Use disciplinary and interdisciplinary lenses to understand the characteristics and causes of local, regional, and global problems; instances of such problems in multiple contexts; and challenges and opportunities faced by those trying to address these problems overtime and place. • D4.7.9-12: Assess options for individual and collective action to address local, regional, and global problems by engaging in self-reflection, strategy identification, and complex causal reasoning.
<p>Staging the Compelling Question</p>	<p>Students will analyze primary source photos of youth activists from the Love Canal environmental disaster in New York. They will respond by noting what they see, think, wonder, and predict as they examine the images.</p>
Lesson Overview	
<p>This inquiry-based lesson spans two class periods and focuses on youth activism toward Superfund sites. Centered on the compelling question, “What actions can youth take to protect the environment?” students will explore what Superfund sites are, their environmental and health impacts, and the presence of Superfunds in their state. They will also examine examples of young citizens advocating for change. This lesson can be used with the EPA & Superfund module in the Action Citizen game. It also can be used to have students consider the legacy of the Industrial Revolution on the U.S. today.</p> <p>The lesson begins with students analyzing primary source photos of youth activists at Love Canal, NY, followed by reading an article on Superfund sites and discussing potential actions for addressing these sites. Students</p>	<p>will then examine a map of Superfund sites across the U.S., investigate how many are in their state, and watch videos of youth activism against these sites. Using this information, they will complete a graphic organizer. The formative performance task involves creating a presentation about a Superfund site in their state, focusing on actionable steps for its cleanup. An extension activity allows students to share their presentations with the public through an infographic, documentary, social media post, or a letter to a government official advocating for action.</p> <p>Materials needed: Chromebook/iPad, pencil/pen</p> <p>Note: Please click embedded links to access online materials.</p>

Procedures:

1. Introduction and Hook:

- Have students examine primary source images of youth activists from the Love Canal, NY, environmental disaster (images featured below). Using the **Youth and the Environment Guided Notes** handout, students will complete a graphic organizer noting what they see, think, wonder, and predict about the images. Afterward, students will share their insights with a partner and then with the class.

2. Compelling Question:

- Introduce the question: “What actions can youth take to protect the environment?” Explain that the lesson will focus on Superfund sites, their conditions, and youth activism. Inform students that all class activities will lead to a final discussion on this topic.

3. Reading and Discussion:

- Direct students to read the *National Geographic* article, “[Superfund](#)” by *National Geographic*. They can read individually, in groups, or as a class. Students will complete the corresponding section in their Guided Notes and then share their responses with the class.

4. Map Analysis:

- Project the [U.S. Superfund sites map](#) from the U.S. Government Accountability Office. Have students answer the following questions:
 - Where are the most Superfund sites? Why do you think they are in those areas?
 - Do you live near a Superfund site?
 - What areas of your state have Superfund sites?

5. Greta Thunberg Quote:

- Share Greta Thunberg, a Swedish youth climate change activist, 2019 quote to the British Parliament, “*You lied to us. You gave us false hope. You told us that the future was something to look forward to. And the saddest thing is that most children are not even aware of the fate that awaits us. We will not understand it until it’s too late. And yet we are the lucky ones. Those who will be affected the hardest are already suffering the consequences. But their voices are not heard.*” Have students discuss the quote in a think-pair-share activity.

6. Distribute to students the **Examples of Youth**

Environmental Activism Graphic Organizer. As a class, have students watch the videos of students taking action to clean up various Superfund sites across the U.S. As students watch the videos, they should take notes in their graphic organizer about the sites’ conditions, government reactions, and students’ actions, and challenges students face.

- “[Teen Maps Contaminants from a Coal Plant](#)” – PBS Learning Media
- “[Environmental Justice: Opposing a Toxic Waste Landfill](#)” – PBS Learning Media
- “[Teen Fights for Toxic Waste Cleanup](#)” – PBS Learning Media

7. After students have watched all the videos and completed the graphic organizer, have students discuss as a class the following questions:

- What is similar about the students and the Superfund sites in the videos?
- What surprised you the most while watching the videos?
- What was inspirational to you from the examples in the videos? Why?

8. Direct students to the [Superfund Site Search](#) by the

EPA. Divide students into small groups of 3-4. Students need to use the search bar when they scroll down on the website to look up Superfund sites in their state. Groups should select one Superfund site to investigate. While researching, students should respond to the questions in Part I of the **State Superfund Site Handout**.

9. As a final summative assessment, after students have researched a Superfund site, students will work together to create a presentation about the Superfund site to the class. Presentations can be created through Canva, Google Slides, PowerPoint, etc. Presentations should be 3-4 minutes. Students will complete Part II of the handout with information from other groups’ presentations.

10. Extension idea: Encourage students to share the information they learned in their presentation with the public. Students could create an infographic of their findings, a documentary, social media post, or write a letter to a government official about what should be done about a Superfund site in their state.



Mariah Pol is a Ph.D. Candidate and Associate Instructor in Social Studies Education at Indiana University. Before doctoral studies, she was a middle school social studies teacher. Mariah was awarded the 2019 Indiana

History Teacher of the Year by the Gilder Lehrman Institute of American History, and the 2020 Caleb Mills Indiana History Teacher of the Year by the Indiana Historical Society.



A protest by Love Canal residents, ca. 1978. EPA photo/Wikipedia.
https://commons.wikimedia.org/wiki/File:Love_Canal_protest.jpg



Young residents in Love Canal joined the protest, Center for Health, Environment & Justice.
<https://www.loe.org/shows/segments.html?programID=13-P13-00050&segmentID=7>



Children protest at Love Canal.

<https://news.wosu.org/great-lakes-today/2018-08-06/love-canal-40-years-later>

Youth and the Environment Guided Notes

Primary Source Questions

I see...

I think...

I wonder...

I predict...

Superfund Questions

Directions: Answer the following questions while reading the [article](#).

1. What is a superfund?
2. What happened at Love Canal? How have your thoughts evolved, considering the images of children at Love Canal that we reviewed earlier in class?
3. How did the Industrial Revolution influence these events?
4. What are your thoughts on who is responsible for cleaning up Superfund sites?
5. What debates exist about land use after cleanup? How do you feel about this issue and why?

Examples of Youth Environmental Activism Graphic Organizer

Directions: Please click the video link that corresponds to each column. As you watch each linked video, take notes in corresponding rows.

	Teen Maps Contaminants from a Coal Plant	Environmental Justice: Opposing a Toxic Waste Landfill	Teen Fights for Toxic Waste Cleanup
Conditions of the Superfund site			
Government's reaction			
Student's actions			
Challenges faced			

State Superfund Site Handout • Part I

Directions: Please visit the [Superfund Site Search](#) page on the EPA website. Use the search bar further down on the page to find a Superfund site in your state. Take notes in the graphic organizer as you research the Superfund site. You will use these notes to later create a presentation that covers the following aspects: the current state of the Superfund site, how it became a problem, work that needs to be done, and activists creating awareness about the site.

Name of the Site	
Location	
How was it realized that the site was a problem? <i>(Contaminants? Effects?)</i>	
What has been done so far? <i>(What actions have citizens and the government taken? Why? What was their background and reasoning?)</i>	
What must continue to be done?	
List of Sources	

State Superfund Site Handout • Part II

Directions: Take notes about the Superfund sites that other groups have researched. You should take notes from at least 3 other groups.