

WATER CHALLENGE | TEACHER GUIDE



Activity Overview:

In this challenge, students will investigate where their water comes from in order to think beyond their water just coming from the faucet. Students will research where their town's water comes from and will participate in a discussion.

Prep Time: 10 minutes

Activity Duration: 20-30 minutes each (research/discussion)

STANDARDS ALIGNMENT

Common Core

- *RI.5.7: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.*
- *RI.5.10: Independently and proficiently read and comprehend informational texts, including history/social studies, science, mathematical, and technical texts, exhibiting complexity appropriate for at least grade 5.*

NGSS

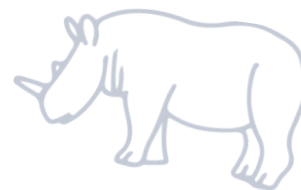
- *5.ESS3.1: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.*

MA Comprehensive Health

- *3.7.CE.1: Analyze the relationship between personal health and the health of the community.*
- *3.7.CE.6: Use accurate information when discussing environmental health issues (e.g., littering, deforestation, recycling, climate change, clean water) that impact people's health.*

MATERIALS NEEDED

- *Student guide (printed)*
- *Student computers*
- *Writing utensil*





BACKGROUND INFORMATION

Water is a precious but limited resource that's harmed by human activities. The majority of Earth's water, around 96.5%, is in the oceans, leaving only 3.5% as freshwater. However, a significant portion of this freshwater is locked in glaciers and inaccessible. Less than 1% of Earth's water is actually usable by humans. This is the focus of our water lesson.

Human actions such as pollution, habitat destruction, and excessive water use have a negative impact on our available water supply. When it rains, trash left outside can be carried into rivers and lakes, or even directly into the ocean through storm drains. Pesticides used in agriculture and fertilizers for lawns can also end up in water sources when it rains. Unfortunately, some of these polluted bodies of water are sources of drinking water, making them unsafe for human use.

To prevent water contamination, avoid using pesticides and chemical fertilizers that can wash into bodies of water. Never dispose of anything in storm drains, and pick up trash to keep it out of waterways.

People also tend to waste clean water. The average American uses 98 gallons of water per day, while others use as little as 4 gallons. Conserving water is as simple as turning off the tap when brushing your teeth and taking shorter showers. Turning off the tap while brushing can save over 200 gallons per month and every minute you cut from your shower saves 2.5 gallons. Protecting our clean water supply from pollution and conserving available water is a collective effort that safeguards both human and environmental well-being.



INSTRUCTIONS

1. Students will research where the water they use at home comes from. They should use the “Water Challenge: Student Guide” to organize their research.
2. Once students have wrapped up their research, they will participate in a discussion (or a writing assignment) and will answer the following questions:
 - a. How close is the source of your water to your home?
 - b. How do your actions contribute to the health of your water source?
 - c. How can you protect your water source to ensure you have clean water?
3. Encourage students to do one of the actions they shared in their answer to the last question in order to protect their water source and help their community.



WATER CHALLENGE | STUDENT GUIDE

Overview:

Where does your water come from? In this challenge, you will investigate the source of your water in order to think about where water from your home faucets originated. You will research where your town's water comes from (examples include a reservoir, lake, well, etc.) and brainstorm ways you can protect your water source!

Where does your water come from? Include town and type of water receptacle.

How close is the source of your water to your home?

How do your actions contribute to the health of your water source?

What will YOU do to protect your water source?? Remember, water is a LIMITED resource!

