

Water Webquest



Resources developed by San Mateo County Office of Education's (SMCOE)
[Environmental Literacy and Sustainability Initiative \(ELSI\)](#) • Last updated June 2022

Purpose and Overview of WebQuests: WebQuests are self-guided learning tools. Using this tool, you can construct your own understanding by choosing which sources are most useful. You can:

- **Choose the *Order*** - Explore resources in any order you want!
- **Choose the *Duration*** - Some resources you might glance through quickly, while others you might spend more time reading carefully.
- **Choose to *Go Beyond*** - Consider the resources in the WebQuest just as a starting point. Let the links take you to other sources that deepen your learning.



*****You should click on at least one resource in each section*****

SECTION ONE: Water is a finite resource

As you navigate through the resources below think about these questions:

- A. *What is the water cycle?*
- B. *How much freshwater is available in the world for our use?*
- C. *Why is water a finite resource?*
- D. *How do humans use water in their everyday lives?*
- E. *Why is it important to conserve water?*

The Water Cycle

- [NASA](#): Gives a background on the water cycle.
- Video: [Earth's Water Cycle](#) and how does it work?

Freshwater Availability

- [High Adventure Science](#): How much freshwater is there in the world and where it's found?
- [USGS](#): Where is Earth's Water?
- Video: [Crash Course Kids](#): The Basics about Freshwater
- Video: [Freshwater Scarcity](#)

Water Footprint

- Video: [What's your water footprint?](#)
- [Water Footprint Calculator](#): Every human can calculate their own water footprint, which means how much water you use. This includes the water we drink and the water we use in other ways.

SECTION TWO: Water Contamination

As you navigate through the resources below think about these questions:

- A. *What was the most surprising or interesting thing you learned in these resources?*
- B. *What or who are some of the most important things that contribute to water pollution?*
- C. *How are ecosystems impacted by water pollution?*
- D. *Where do you see opportunities to reduce water pollution?*
- E. *If you could teach someone else the most important things to know about the issues related to these water system problems, what would you tell them? Explain in no more than 2-3 sentences.*

- Video: [Water Pollution](#)
- Website: [Water Pollution](#)
- [The Story of Bottled Water](#): A documentary on bottled water and water quality globally. In addition bottled water contributes to pollution through the creation of more plastic.
- [Harmful Algae Blooms](#) create “dead zones” in which wildlife can not flourish due to algae absorbing all the available oxygen in the water.
- [Microplastics Overview](#). Microplastics are small plastic pieces less than five millimeters long which can be harmful to our ocean and aquatic life.

SECTION THREE: Climate Change and Water

As you navigate through the resources below think about these questions:

- A. *What was the most surprising or interesting thing you learned in these resources?*
- B. *How are climate change and water related?*
- C. *How are climate change and storms related?*
- D. *How does climate change affect ocean life?*

- [Climate Central](#): Heavy Rain and Flooding
- Video: [Climate Change: The Water Paradigm](#)
- [NRDC](#): Hurricanes and how climate change will impact them
- Video: [What Causes Sea Level Rise?](#)
- Video: [Coral Reefs and Climate Change](#)
- [Coral Bleaching](#)

SECTION FOUR: Water Management Systems

As you navigate through the resources below think about these questions:

- A. *What was the most surprising or interesting thing you learned in these resources?*
- B. *How does water get from the source to your faucet?*
- C. *Where does the water go when you flush the toilet?*
- D. *How does plumbing bring freshwater to you and wastewater away from you?*

- Video: [How Does Water Get to Your Tap?](#)
- [How does water get to my faucet?](#)
- Video: [How Do Sewer Systems Work?](#)
- [Where does my poo go when I flush the toilet?](#)
- [What you need to know about home plumbing](#)

SECTION FIVE: How to conserve (save) water and keep it clean

As you navigate through the resources below think about these questions:

- A. *What was the most surprising or interesting thing you learned in these resources?*
- B. *How can we keep plastics out of the ocean?*
- C. *Why should we care about conserving water?*
- D. *How can we conserve water?*

- Video: [How can we keep plastics out of our oceans?](#)
- Video: [Water fix!](#)
- [Watersense](#): Simple ways to save water
- [Water conservation tips](#)