



GRAB-AND-GO WATER ACTIVITIES

for Orange County K-12 teachers



WHAT'S INCLUDED

- ✓ Activity Background
- ✓ Learning Objectives
- ✓ Activity Procedure
- ✓ List of Materials
- ✓ Advanced Resources
- ✓ Key Terms and Definitions

Water Awareness Poster Contest:
[MWDOC.com/postercontest](https://www.mwdoc.com/postercontest)

Creating Water Awareness

Students will reflect on their relationship with water as they explore ways to use it more wisely and discover how access to clean, fresh drinking water improves our daily lives. Students will walk through their home or school, either alone or in groups, and think carefully about how water is used and how pollution impacts the water supply we rely on. As they observe their surroundings, students will think about elements to add to their art project that expresses what water means to them and reflects why it is essential to keep pollution and other contaminants out of our waterways and ocean. Students will be able to explain their findings to their peers or families and communicate the need for a healthy, sustainable water supply for future generations.

Activity Background

Did you know? The water that was here billions of years ago still exists today. This is made possible by the natural processes of the water cycle. The water cycle acts as a natural filtration system as it cleans water and removes pollutants; however, it cannot do so at the rate or level that meets human needs. With an ever-growing population, humans can significantly influence our water supplies. First, pollution can compromise the quality of our freshwater supply, and second, increased water use can impact the quantity that is readily available.

Earth's natural systems provide humans with all of the resources they need to survive: food, water, air, shelter, and more. Humans depend on and benefit from water, from drinking to irrigation to cleaning and food preparation. It is an essential natural resource that individuals, communities, agriculture, and industries use every day. Unfortunately, water isn't always available where and when we need it. While 71% of the Earth is covered in water, less than 1% is freshwater available for people to use and drink. Because water is a limited resource and a challenge to access, we must all do our part to protect our water supplies. The choices we make when it comes to water use can impact the overall quality, quantity, and availability of water for future generations. Even the smallest changes can make a big difference.



Learning Objectives

Through this activity, students should be able to:

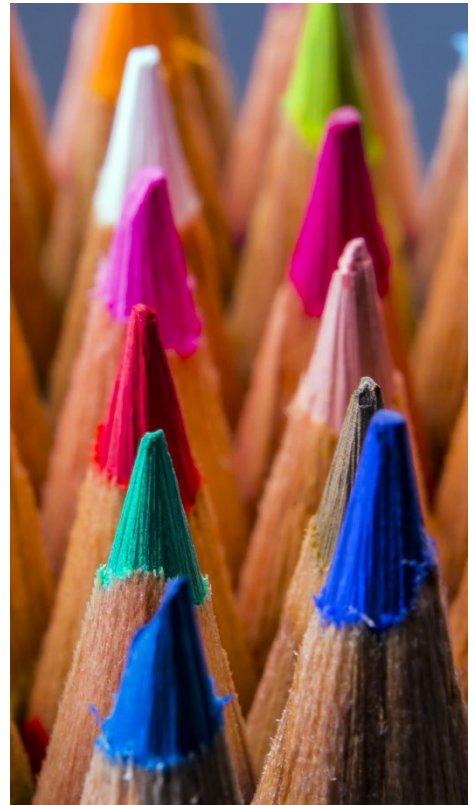
- ◆ Creatively express their relationship with water and responsibility to be good water stewards
- ◆ Observe where and how water is used both inside and outside of their home or school
- ◆ Explain the effects humans have on the quality, quantity, and availability of fresh drinking water
- ◆ Identify water pollution prevention opportunities around their home or school
- ◆ In a written summary or spoken presentation, describe, analyze, and interpret their artwork

Your Water Awareness Artwork

In this activity, students will take a walk around their home or school campus to observe how humans interact with and impact the environment—specifically their relationship with water. After identifying ways that water is used, students will create an art poster that demonstrates how we can all do our part to protect our most precious natural resource and keep pollution from entering our waterways. Be sure to ask guiding questions to help students connect, reflect, and communicate the value of water and the role it plays in our everyday lives.

PROCEDURE:

- ◆ Guide students in a discussion about the value of water, and the importance of protecting this limited, natural resource. When you turn on the faucet in the morning, where does the water come from? Who else is using the water besides you? How is the water used? Do you think you could go an entire day without using any water? Water used for drinking doesn't count! **Tip:** Use the links in the Advanced Resources section for a more in-depth exercise and discussion.
- ◆ Using a blank sheet of writing paper, have students make a list of all the ways that they use water both indoors and outdoors at their home or school. Encourage students to think carefully about how they use water throughout the day. **Tip:** Consider different uses: personal use (drinking), community use (firefighting), agricultural use (watering crops), and industrial use (cooling).
- ◆ Next, have students review their water use list and identify areas where there is an opportunity to save water—turning off the water while brushing their teeth, washing only full loads of laundry, etc. **Tip:** Ask students if there are opportunities to work together with their peers or families to save water.
- ◆ Then, have students identify areas where there is an opportunity to fight pollution. **Tip:** Ask students to come up with practical solutions to reducing pollution. Consider putting at least one of those solutions into action.
- ◆ Using the Stella whale outline and the art medium of their choice, have students create a design that demonstrates what water means to them, and how together we can protect our water supply for future generations.



LIST OF MATERIALS

- ✓ 8.5" x 11" Stella the Baby Gray Whale outline
- ✓ Blank sheet of writing paper
- ✓ Colored pens, pencils, markers, paints, etc.

ADVANCED RESOURCES

- ✓ Orange County water supply: [MWDOC.com/your-water/](https://www.mwdoc.com/your-water/)
- ✓ Water use calculator: [watercalculator.org](https://www.watercalculator.org)
- ✓ Stormwater interactive map. [h2oc.org/protector/](https://www.h2oc.org/protector/)



Creating Water Awareness

Key Terms and Definitions

- 01 Agricultural Water Use:** Water that is used to process food, water cattle, and grow crops that provide food and other products.
- 02 Freshwater:** Naturally occurring water such as glaciers, lakes, rivers, and streams. This does not include seawater or water from the ocean.
- 03 Industrial Water Use:** Water that is used for power generation as well as for manufacturing, processing, washing, cooling, and transporting products.
- 04 Natural System:** Systems that occur in nature without any human influence like weather, rivers, or trees.
- 05 Natural Resource:** Materials or substances from nature that can be used by people, like air, plants, animals, soil, and water.
- 06 Pollution:** The introduction of harmful materials into the environment.
- 07 Sustainable:** The ability to maintain something at a certain rate or level. A sustainable water supply means ensuring there is a reliable supply of water to meet human needs.
- 08 Water Cycle:** The continuous movement of water between the atmosphere and Earth. There are six processes of the water cycle: evaporation, condensation, precipitation, percolation, runoff, and transpiration.
- 09 Water Quality:** The measurement of how clean and healthy your water is to drink and use.
- 10 Water Use:** How we use water every day. Direct water use is water that we use to drink, shower, wash our dishes and clothes, and water our plants. Indirect water use is water used to make everything we wear, buy, sell, and eat.
- 11 Water Use Efficiency:** Reducing water waste by measuring the amount of water typically used for a specific purpose, and adjusting that amount to only use what is needed.

