

Subject: Elementary Science (Earth & Space)

Grade: 3rd-5th

Date:

Lesson Title: Protection & Water Conservation

Overview: This is the final lesson plan in the water resources recovery curriculum. Once students become familiar with the water cycle, pollution, and wastewater treatment, this lesson teaches students the importance water protection and conservation. This allows students to become aware how much water they use daily and teaches them how they can better conserve water and the proper way to dispose household items.

Targeted Common Core Standards		Objectives
<ul style="list-style-type: none">✓ RI 7: Use information gained from illustration (e.g., maps, photographs) and the words in a reading to demonstrate understanding (e.g., where, when, why, and how key events occur).✓ SL1: Engage effectively in collaborative group discussions with diverse partners on grade specific topics and building on ideas.✓ W2: Write informative/explanatory pieces to examine a topic and convey ideas and information clearly.	<ul style="list-style-type: none">✓ W2: Write informative/explanatory pieces to examine a topic and convey ideas and information clearly.✓ W9: Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	<ul style="list-style-type: none">• To become aware of the amount of water used every day.• To identify ways to conserve water.• To educated students on the proper ways to dispose waste.• To get students in engaged water conservation and protection.
Materials for lesson		

Definitions

Conservation: To preserve or efficiently use resources

Hazardous Waste: Waste that has substantial threats to public health or the environment

Non-point source pollution: Pollution that does not enter water at any particular spot.

Rainwater Harvesting: Is an alternative water supply that captures, diverts, and stores rainwater for later use.

Background

Drinking water infrastructure is one of the most fundamental types of infrastructures. It is important to households, industry, government, and commercial business. Drinking water systems provides a critical health function, bringing fresh, clean water to users. It is essential to life, economic development, and growth. Although the United States' drinking water quality remains high, with growing challenges such as climate change, depleted aquifers, polluted waterbodies, and a growing population, there is a constant concern on maintaining water infrastructure in order to protect public health. This is why water conservation and protection are important, so that water can be accessible to everyone.

Essential Questions

Before the lesson ask students,

- To share what their favorite water activity is (e.g. swimming, watering plants, going to the pool, going to the beach, etc.).
- Then ask them how they would feel if they couldn't do it anymore because of pollution.
- What are some of the ways they think they can fight water pollution?

PowerPoint & Activities

Use the *Protection and Water Conservation* PowerPoint to introduce and explain the different ways that we can save water and properly dispose of materials. Once the lesson is done, set students up into groups of 2 or 3 to work on the “Water Goes Around and Comes Around” activity.

This hands-on activity by the Water Environment Federation, allows students to work together to brainstorm ways to conserve water. This activity, revisits key points from lessons 1 and 2, and provides a comprehensive close to the curriculum.

For more information visit the Water Environment Federation Website:

<https://www.wef.org/resources/for-the-public/k-12-resources/>

Teacher Notes



