

Unit 2 Overview

CLEAN WATER FOR ALL



This unit focuses on learners gaining an understanding about water as a human right and challenges in achieving clean water for all.

What's covered?

The lessons in this unit:

- Explore the importance of water as a human right, and what's needed to achieve this.
 - Emphasize the importance of human actions and choices in helping to solve clean water issues and achieve water equity, both locally and globally.
- Topics include: clean water access, sanitation, water equity, water filtration, bottled water

About these lessons:

Standards: These lessons are aligned to: Next Generation Science Standards, National Council of the Social Studies, and Common Core State Standards for English Language Art and Literacy, Framework for 21st Century Learning, Climate Literacy Principles, Water Literacy Principles. See our Overview Matrix for a listing of lessons and the standards to which they are aligned.

Timing: The suggested lesson duration included in the lessons can be used as a guide for how long they should take, as each classroom is different. Depending on the size and length of each class, these lessons can be taught in one sitting or over a few days.

Content: Many of the topics in these lessons can evoke an emotional response from learners. Modify the lessons as needed to ensure they are appropriate for your learners. Anticipate the questions and responses these discussions and activities may elicit.

Essential question for the unit:

What are the barriers to 'clean water for all' and how can I help overcome them?

The Learning Objectives of these lessons:

- The importance of the Sustainable Development goals (SDG), particularly SDG 6, which is about access to clean water and sanitation.
- How the different parts of water, sanitation and hygiene work together for human health.
- People face clean water and sanitation access issues in the U.S. and globally, and how some of these are being addressed.
- The importance of water filtration and how it works.
- The implications of the choices we make around bottled water vs. tap water.
- How individuals and organizations can change the lives of other humans for the better, as it pertains to access to clean water and sanitation for all, with an emphasis on Uganda.

THE 5 LESSONS:

THE FIVE LESSONS IN THIS UNIT CAN BE TAUGHT AS A COMPLETE SET OR INDIVIDUALLY.

Clean Water is a Human Right

Learners learn about the Sustainable Development Goals (SDG), specifically SDG 6, which focuses on clean water and sanitation access for all. They watch and reflect on a documentary that highlights Drink Local Drink Tap's work to address this issue.

Intro to WASH - Water, Sanitation, Hygiene

Learners develop an understanding of sanitation in different parts of the world by discussing how water, sanitation and hygiene work together to support good health.

We Have a Clean Water Problem

Learners discuss water protection and access issues faced in the United States. They research and present findings related to community water systems, water equity issues and possible solutions.

How Do Water Filters Work?

Learners discuss clean water access inequalities in the world, the importance of water filtration, and design their own filters.

Tap vs. Bottled Water

Learners learn about bottled water and its problematic impact through research and documentaries. They take a stand on issues related to bottled water and discuss the importance of individual choices.

Website suggestions:

CDC <https://www.cdc.gov/healthywater/drinking/index.html>

EPA <https://www.epa.gov/sdwa>

Food and Water Watch <https://www.foodandwaterwatch.org/about/live-healthy/tap-water-vs-bottled-water>

The Water Project https://thewaterproject.org/resources/elementary_books

Unicef <https://www.unicef.org/stories/11-lessons-water-school>



UNIT 2: CLEAN WATER FOR ALL



Lesson 1: Clean Water is a Human Right

National Council for the Social Studies (NCSS)

D2.Civ.3.6-8. D2.Geo.5.6-8. D2.Geo.10.3-5.

Framework for 21st Century Learning

Global Awareness

Environmental Literacy

Water Literacy Principles

Water is Essential for All life to Exist

Water is a Natural Resource

Water Resources Are Managed

Water Resources Exist within Social Constructs

Climate Literacy Principles

Life on Earth depends on, is shaped by, and affects climate.

Human activities are impacting the climate system. Climate change will have consequences for the Earth's systems and human lives.

Lesson 2: Intro to WASH – Water, Sanitation, & Hygiene

Next Generation Science Standards (NGSS)

3-5-ETS1-1.

National Council of the Social Studies (NCSS)

D2.Geo.5.6-8.

Framework for 21st Century Learning

Environmental Literacy Global Awareness Health Literacy

Water Literacy Principles

Water is Essential for All life to Exist

Water is a Natural Resource

Water Resources Are Managed

Water Resources Exist within Social Constructs

Climate Literacy Principles

Climate change will have consequences for the Earth's systems and human lives.

Lesson 3: We Have a Clean Water Problem

Next Generation Science Standards (NGSS)

5-ESS3-1.

National Council of the Social Studies (NCSS)

D2.Civ.3.6-8.

Common Core State Standards for English Language Art and Literacy (ELA)

CCSS.ELA LITERACY.W.4.7, 5.7, 6.7, 7.7, 8.7

CCSS.ELA LITERACY.W.4.2, 5.2, 6.2, 7.2, 8.2:

Framework 21st Century Learning

Global Awareness Environmental Literacy Health Literacy

Water Literacy Principles

Water is Essential for All life to Exist

Water is a Natural Resource

Water Resources Are Managed

Water Resources Exist within Social Constructs

Lesson 4: How do Water Filters Work?

Next Generation Science Standards (NGSS)

3-5-ETS1-1. MS-ETS1-1. MS-ETS1-2. MS-ETS1-3.

Water Literacy Principles

Water is Essential for All life to Exist

Water Resources Are Managed

Water Resources Exist within Social Constructs

Lesson 5: Tap vs Bottled Water

Next Generation Science Standards (NGSS)

5-ESS3-1. MS-ESS3-4.

Common Core State Standards for English Language Art and Literacy (ELA)

CCSS.ELA-LITERACY.W.4.7, 5.7, 6.7, 7.7, 8.7.

Framework for 21st Century Learning

Environmental Literacy

Water Literacy Principles

Water is Essential for All life to Exist

Water is a Natural Resource

Water Resources Are Managed

Water Resources Exist within Social Constructs

Climate Literacy Principle

Human activities are impacting the climate system. Climate change will have consequences for the Earth's systems and human lives.

UNIT 2: CLEAN WATER FOR ALL



Lesson 1: Clean Water is a Human Right

Science Standards

3.ESS.1 3.ESS.2 3.ESS.3 4.LS.1

ELA Standards

W.3.2 W.3.8 W.4.2 W.4.8 W.5.9

Social Studies Standards

4th Grade Geography 12: People have modified the environment throughout history resulting in both positive and negative consequences in Ohio and the United States.

4th Grade Economics 20: Tables and charts organize data in a variety of formats to help individuals understand information and issues.

5th Grade Economics 14: The choices made by individuals and governments have both present and future consequences.

6th Grade Economics 12: The choices made by individuals and governments have both present and future consequences. The evaluation of choices is relative and may differ across individuals and societies.

8th Grade Government 20: Active participation in social and civic groups can lead to the attainment of individual and public goals.

Lesson 2: Intro to WASH – Water, Sanitation, & Hygiene

Science Standards

3.ESS.2 3.ESS.3 3.LS.3 4.LS.1 5.LS.1 6.LS.4 7.LS.1 7.LS.2 8.LS.1

ELA Standards

W.3.8 W.4.2 W.5.9 W.6.1

Lesson 3: We Have a Clean Water Problem

Science Standards

3.ESS.1 3.ESS.2 3.ESS.3

ELA Standards

W.3.8 W.4.2 W.5.9

Social Studies Standards

6th Grade Economics 12: The choices made by individuals and governments have both present and future consequences. The evaluation of choices is relative and may differ across individuals and societies.

8th Grade Government 20: Active participation in social and civic groups can lead to the attainment of individual and public goals.

Lesson 4: How do Water Filters Work?

Science Standards

3.ESS.1 3.ESS.2 3.ESS.3 7.ESS.1

ELA Standards

W.3.2 W.3.8 W.4.2 W.4.8 W.5.9

Social Studies Standards

4th Grade Economics 20: Tables and charts organize data in a variety of formats to help individuals understand information and issues.

5th Grade Economics 14: The choices made by individuals and governments have both present and future consequences.

8th Grade Government 20: Active participation in social and civic groups can lead to the attainment of individual and public goals.

Lesson 5: Tap vs. Bottled Water

Science Standards

3.ESS.1 3.ESS.2 3.ESS.3 7.ESS.1

ELA Standards

W.3.2 W.3.8 W.4.2 W.4.8 W.5.9

Social Studies Standards

4th Grade Economics 20: Tables and charts organize data in a variety of formats to help individuals understand information and issues.

5th Grade Economics 14: The choices made by individuals and governments have both present and future consequences.

8th Grade Government 20: Active participation in social and civic groups can lead to the attainment of individual and public goals.