WE VILLAGES:
WATER PILLAR

LESSON PACKAGE FOR GRADES 4 TO 8

AN INITIATIVE OF
Dear Educator,

Welcome to the WE Movement. We are so glad you’ve joined us in our mission to inspire, education and empower students to find their place in the world. Throughout the last two decades, educators have stood by us. With over 12,000 schools thriving in WE Schools, we are delivering impressive results in academic engagement, life skills and civic engagement. Through the WE Schools method of experiential service-learning, students engage in collaborative learning and independent reflection. As a result, your students will become more engaged in local and global issues.

We have been delivering equally impressive results in our international work. Through Free The Children’s WE Villages sustainable development model that provides access to the Pillars of Impact—Education, Water, Health, Food and Opportunity—to empower a community with the means to forever lift itself from poverty. All the projects and programs of WE Villages are owned and maintained by the community and are designed to be self-sustaining after the initial project implementation.

The WE Villages Pillars of Impact lesson packages provide students with insight into the issues and barriers that, combined, prevent children from attending school in developing communities. They then learn how the WE Villages sustainable development model is applied to each community’s needs. Whether you are beginning a fundraising campaign for WE Villages and want to help students understand why funds are needed, where they are going and what they will be used for or if you are interested in increase student knowledge on sustainable development, we hope these lesson packages serve you well.

Together, we have the power to reignite the fundamental purpose of education: increasing student initiated learning and preparing them with the life skills to better the world and forge their own paths to success.

Thank you for having the heart and passion to bring WE into your classroom. We are honored and encouraged to work with such a dedicated and enthusiastic group.

We are stronger together,

Craig and Marc Kielburger
Co-Founders, WE
WE Schools

WE Schools is a unique, step-by-step program that challenges young people to identify the local and global issues that spark their passion and empowers them with the tools to take action. Educators and students work together to learn about the world and take action to create meaningful change. Delivered in 12,300 schools and groups across North America and the UK, the program provides educators and students with curriculum, educational resources and a full calendar of campaign ideas.

Essential Question:
What is experiential service-learning and how can I incorporate it into my classroom instruction with WE Schools curriculum resources?

Experiential service-learning is based on a structured academic foundation that goes beyond volunteering and community service. It’s a practice that engages teachers and students with their communities in a structured way and allows students to meet their learning objectives while addressing their community’s needs.

The Four Steps of WE Schools

1. INVESTIGATE AND LEARN
   Students explore topics related to a real-world challenge or opportunity.

2. ACTION PLAN
   Students develop a plan to implement their service-learning project, including one local and one global action.

3. TAKE ACTION
   Students implement their action plan.

4. REPORT AND CELEBRATE
   Students present the results of their service-learning initiatives.

Setting Students Up For Success: In School, The Workplace, And In Life.

WE Schools Introduction: WE.org/we-at-school/we-schools/

Living WE is about improving our lives and our world by reaching out to others. It involves focusing less on “me” and more on “we” — our communities, our country and our world.

Social Emotional Learning: The WE Learning Framework is grounded in social emotional learning principles, helping students develop the skills to manage their emotions, resolve conflict and make responsible decisions.

Global Mindset is the ability to operate comfortably across borders, cultures and languages is invaluable. WE Schools programming promotes global mindedness and cultural competency amongst student populations during their formative years.

Active Citizenship: Students act on their growing knowledge by connecting with others in their communities, thereby generating interest, further research and engagement in local and national causes.

Reflection is a key component of our experiential service-learning model. Our reflection activities direct students’ attention to new interpretations of events and provide a lens through which service can be studied.
WE Villages: Water Pillar Overview

Imagine if getting a drink of water wasn’t as simple as turning on the tap. Clean water isn’t a luxury; it’s a basic human right. But millions of people around the world don’t live near a reliable, clean water source, or have access to sanitary washing facilities, leaving them at risk of illness and deadly disease. Improving access to clean water is one of the most crucial and quickest ways to lift a community out of poverty. It reduces illness, allows girls to go to school instead of retrieving their family’s water and leads to better agriculture and access to food.

In this lesson package students will be introduced to the Water pillar, measure the amount of water they use on average each day, explore the issue of clean water as a universal human right, and discover how clean water and sanitation can improve the overall health and livelihood of a person. The lessons are grounded in the WE Learning Framework, ensuring students develop core skills that can help them achieve the learning goals and outcomes that contribute to becoming a global citizen.

This lesson plan package is meant to be informative, generative and empowering for teachers and students. Once completed, continue exploring social issues through one or more experiential service-learning supports:

- Frontline Support: Professional needs-based support for your classroom and extracurricular needs.
- Global Voices: A weekly lifestyle column linked to global issues, that includes educator resources.
- Customized Leadership Training: Additional support for students who wish to grow their leadership capabilities.
- Service-Learning Trips: Opportunities to explore the impacts of WE Villages service work.

Rationale

Free The Children’s WE Villages is a sustainable development model that provides access to the Pillars of Impact—Education, Water, Health, Food, and Opportunity—to empower a community with the means to forever lift itself from poverty. Why these pillars? Because together they can achieve a greater impact. All the projects and programs implemented under the WE Villages model are owned and maintained by the community, and designed to be self-sustaining after the initial project implementation.

Since the creation of the Water pillar one million people have gained improved access to clean water and sanitation.

Assessing the Learning

You know your students best—their learning styles and preferences, skill levels and knowledge. You are in the best position to anticipate the habits of mind that will make this lesson package successful.

In this lesson package the teaching strategies include independent writing, group work, class discussion and brainstorming. Strategies to assess learning include written reflection, graffiti, tracking/logging and presentations.

Explore our resources and current campaign offerings at WE.org
WE VILLAGES:
WATER PILLAR

SUBJECT(S): English Language Arts, Health and Physical Education, Social Studies

GRADE LEVEL: Grades 4 to 8 with suggestions for younger students

ESTIMATED TIME: 280 minutes

ESSENTIAL QUESTIONS:
• Why is clean water a human right?
• How can access to clean water improve the overall health and livelihood of a person?

LEARNING GOALS:
Students will:
• Participate in active group work, hands-on projects and class discussions about clean water and sanitation
• Measure the amount of water they use on average each day
• Build an understanding of the Universal Declaration of Human Rights
• Examine global barriers that prevent access to clean water and proper sanitation facilities
• Engage in a fundraising initiative to support WE Villages Water Pillar

Core Skill Sets
Look for these icons at the top of each lesson. The icons identify the most relevant core skills being developed. Learn more about the WE Learning Framework at www.WE.org/we-schools/program/learning-framework/.

WORD BANK
Potable water—safe to drink; drinkable

MATERIALS AND RESOURCES
• Front Board
• Paper and writing utensils
• Computer with Internet access
• Appendix 1: Assessment Rubric
• Blackline Master 1 – Water Challenge
• Blackline Master 2 – Water Challenge Recommendations
• Blackline Master 3 – Tracking Your Water Usage
• Blackline Master 4 – Global Voices by Marc and Craig Kielburger
• Blackline Master 5 – International Water Conference
**ELEMENTARY/MIDDLE SCHOOL LESSON PACKAGE**

**INTRODUCTORY LESSON:**

**MEASURING THE IMPORTANCE OF WATER**

Objective: Students will create a poster about water conservation, that includes both visual and text references that address individual’s water usage.

**COMMON CORE CONNECTIONS:**

- CCSS.MATH.CONTENT.3.MD.A.2 (Math) Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).
- CCSS.MATH.CONTENT.3.MD.B.3 (Math) Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.
- CCSS.ELA-LITERACY.CCRA.SL.1 (Speaking and Listening) Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.

**Course connections:** English Language Arts, Social Studies

**Estimated time:** 70 minutes

**Special materials:** 5 gallon bucket of water, several empty one-gallon pails, towels, measuring cups, blackline masters

**Investigate and Learn**

**Steps:**

1. EDUCACTOR’S NOTE: Before the class begins, fill a 5-gallon pail (or five one-gallon pails) with water and place it in the middle or front of the room. If possible, place the pail(s) on a towel or tarp as students will be measuring water out of the bucket and there is potential that water will be spilled. Place empty pails beside the water-filled pail(s).

2. After they have finished brainstorming, briefly discuss their answers. Use the following questions to guide the discussion.
   - Are you surprised by how many uses there are for water? How many of them are necessary for your everyday activities?
   - How important is water to life? Can you live without water? Why not?
   - How much water do you think is necessary to meet all your needs for one day?

3. Divide the class into groups of four and distribute Blackline Master 1: Water Challenge. Point out the 5-gallons of water in the room. Explain that according to the UN, 50 to 100 litres is considered to be enough water to meet one person’s basic needs for one day. In many developing countries, however, 5 gallons of water (about 80 cups) is thought to be a more accurate representation of the minimum amount of water that is both necessary and reasonably available to meet one person’s needs. Group of four represents a family living in a developing country, and the Water Challenge handout they have been given is a list of all the basic tasks they need to do that require water. As a group, they must combine their resources and decide how much of their water they will allot to each task. They can use the measuring cups and empty buckets to see what a specific amount of water looks like in reality.

4. Give students 15 minutes to complete this activity.

5. Regroup the class for discussion using the guided questions below. It is fine if groups have not finished because they are having difficulty deciding on amounts. This will add to the discussion.
   - Was this task difficult? Why or why not?
   - Were there any tasks on your list that did not receive any water? If so, which ones? Why?
   - Were there tasks that you had to sacrifice in order to complete others? If so, which ones?
   - What defines a task as being “necessary for basic human needs”? Which tasks would fall under this definition?
6. Next ask students, what happens if you never have enough water to:
   • Water your garden? (Can’t grow food.)
   • Wash your laundry? (Dirty clothes, maybe bugs or germs, could get sick.)
   • Take a bath or shower? (Same as above.)
   • Wash your hands? (Same as above.)
   • Cook three meals a day? (Get hungry, become weak and sick.)
   • Wash the dishes? (Can’t cook, could get sick.)

7. Finally ask students: If every day you only have 5 gallons of water per person to work with, do you think you would ever be able to do all the tasks on the list? Why or why not?

8. Reveal to the class the actual recommended amounts for each task on the list found on Blackline Master 2: Water Challenge Recommendations.

   Note: Flushing the toilet was not included in the tasks but is a major use of residential water in North America. Consider discussing with your class why this task was not included on the list they were given.

9. Remind the class that for many people in developing countries, 5 gallons of water per person per day is their reality. Some people live off of less. Discuss with your class whether they feel that 5 gallons is actually a realistic or acceptable amount for people to live off of.

10. Share the following facts:
    • The average American uses 100 gallons of water every day (over 20 times what is considered necessary to meet basic human needs).
    • Residential water in America is used for flushing the toilet (26%), washing laundry (22%) and showering (17%).

11. Distribute Blackline Master 3: Tracking Your Water Usage. Give students time to work out their own daily water usage.

12. Discuss:
    • Are you surprised by the amount of water that you use in a day?
    • How do you feel when you compare the amount of water you use in a day to the 5 gallons of water in the bucket (i.e., the total amount that many people are limited to)?
    • What are some of the environmental and economic consequences of using more water than we need to?
    • Could the amount of water you use be reduced? If so, how?
    • How could the amount of water used in a community most easily be reduced?

13. Write the following on the board: “Reduce and Recycle.” Tell students that while recycling is a term generally applied to aluminum cans, glass bottles and newspapers, water can be recycled as well. Water recycling is reusing wastewater for purposes such as flushing toilets, watering agricultural crops, maintaining landscapes and more.

14. Provide each student with an 8.5 by 11” sheet of blank paper. As a class, brainstorm ways to reduce and recycle water in your community, looking at examples below. Then have students create a poster to share tips on how to reduce and recycle water. Advertise the posters around the school to spread awareness.
   • Don’t use the toilet as a wastebasket. Flush only when necessary.
   • Take showers instead of baths and make showers shorter.
   • Don’t let water run down the drain while you brush teeth, wash dishes, wash fruits, etc.
   • Wash only full loads of dishes or clothes.
   • Wash the car using a bucket. Use a hose only when rinsing.
   • Never put water down a drain when there may be another use for it, such as watering a plant or garden, or cleaning.

   For more ways to conserve water visit wateruseitwisely.com/100-ways-to-conserve/.
   Source for statistics: www3.epa.gov/watersense/pubs/indoor.html
**CORE LESSON:**

THE RIGHT TO CLEAN WATER

Objective: Students will create posters on the topic of water related illnesses by summarizing research findings and class discussions in order to promote greater awareness of this global issue.

**COMMON CORE CONNECTIONS:**

CCSS.ELA-LITERACY.CCRA.R.2 (Reading)
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

CCSS.ELA-LITERACY.CCRA.W.5 (Writing)
Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

CCSS.ELA-LITERACY.CCRA.SL.1 (Speaking and Listening)
Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

CCSS.ELA-LITERACY.CCRA.SL.4(Speaking and Listening)
Present information, findings, and supporting evidence such that listeners can follow the line of reasoning the organization, development, ad style are appropriate to task, purpose, and audience.

Instructional method(s): Brainstorming, class discussion, group work, presentation

Differentiated instruction:
- Allow students to read the Global Voices article independently.
  Write the statistics down on the board.

Course connections: English Language Arts, Social Studies

Estimated time: 140 minutes

Special materials: Chart paper, projector (if possible)

**Part One:**

**EDUCATOR’S NOTE:** Prepare the following before starting the lesson. Pour a tablespoon of soil or dirt in a clear glass of water and stir the soil until it is mixed with the water. This will make the water appear dirty.

1. To begin, walk around the classroom and show students the glass of water. Ask if anyone is interested in drinking the water. Following their reactions, ask students:
   - Why wouldn’t you drink the water?
   - How might you be affected by drinking dirty water?
   - Have you ever gotten sick from drinking unclean water? Do you know someone who has?

2. Write the words “Potable Water” on the board. Share with students that potable water is also known as safe drinking water. Explain that natural water needs to be treated in order to be safe for consumption. For many developing communities around the world, the same water source that’s used to collect household water for drinking and cooking is also used as a dumping ground for human and animal waste. These water sources are plagued with harmful bacteria and contaminants that can cause serious illnesses to a person. These illnesses are known as waterborne diseases.

3. Organize the class into groups of three to four students. Have each group take out a sheet of paper and write the word “True” on one side of the sheet and “False” on the other side.

   - 663 million people around the world do not have access to clean and safe water. (True)
   - One in 20 people worldwide does not have access to safe and clean drinking water. (False: one in nine)
   - 20% of the Earth’s population lacks clean, safe drinking water. (True)
   - The water crisis is the number one global risk based on impact to society. (True)
   - Over half of the developing world’s primary schools don’t have access to water and sanitation facilities. (True)
   - 10% of people who lack access to clean water live in rural areas. (False: 84% of people…)
   - Nearly one out of five deaths in children under the age of five worldwide is due to a water-related disease. (True)
   - In developing nations, only 20% of illnesses are linked to poor water and sanitation conditions. (False: as much as 80% of illnesses)


**EDUCATOR’S NOTE:** Group work will be required in this lesson from this point forward. Ensure students work with the same group members throughout the lesson.

4. Following the statistics, provide each group with a sheet of chart paper. Ask students to answer the following questions collaboratively and choose one group member to write down their responses:
   - What statistics surprised you the most? Why?
   - What do you think are some of the major factors contributing to the global water crisis (climate, lack of water systems, industrial waste dumping, etc.)?
   - How can the lack of clean water affect the livelihood of a person?
   - How would your life be different if you did not have access to clean water?
   - Do you think access to clean water is a human right?
5. Ask for volunteers from each group to share their responses.

6. Write the term “Universal Declaration of Human Rights” on the front board. Explain that the Universal Declaration of Human Rights (UDHR) is an internationally agreed upon document that states basic rights and fundamental freedoms to which all human beings are entitled. Show students the following video to give them a better understanding of the UDHR (10:00) www.humanrights.com/#/what-are-human-rights.

7. Ask students:
   • Do you think access to clean water and sanitation is a human right? Why?

8. Share with students that the UN officially recognized water as a human right in 2010. Ask students: Are you surprised that water was only recognized by the UN in 2010? Explain.

9. Next, distribute to each group one copy of Blackline Master 4: Global Voices “The Right to Clean Water.” First read the article aloud, then write the following question on the board: What does recognizing clean water as a human right mean for countries?

10. Ask groups to find the response to the question in the article. Ask one member from each group to highlight sentences and/or paragraphs they believe answer the above question.

11. Give students 10 minutes to complete the activity. Then ask:
   • Do you think a nation must meet the three obligations mentioned by Maude Barlow? Explain.
   • Why is Canada resistant to recognizing clean water as a human right?
   • How does Canada’s decision to resist clean water as a human right affect its citizens? How is it currently affecting its citizens? (e.g., lack of clean water on First Nations reserves.)

12. Tell students to imagine they are scientists and have been invited to attend the International Water Conference. Each group represents a different association of scientists who specialize in waterborne diseases. Inform students that this conference has been organized to explore the consequences of the most common waterborne diseases found in untreated water and provide an argument as to why clean water should be a human right.

13. Assign each group one of the waterborne diseases from the list below. Explain to students that as a group they will research their assigned disease for homework and prepare a booth presentation to display at the International Water Conference the next day. Their research can be presented on tri-fold poster boards.
   List of the most common waterborne diseases: Diarrhea, Hepatitis A, Typhoid fever, Cholera, Dysentery

14. Distribute one copy of Blackline Master 5: International Water Conference to each group. The blackline master will assist students with their research and serve as a guide for the presentations.

EDUCATOR’S NOTE: Advise students to split the research questions amongst one another for homework. The second day should be dedicated solely to presentations.

Part Two:

1. Begin by rearranging the classroom to set up for the International Water Conference. Ask students to move their desks to the back walls. Ensure there is enough space in the centre of the classroom for students to move freely between the presentations.

2. Give students 10 minutes to set up their booths and make their station appealing for the attendees.

3. Once the booths are set up, evenly split the groups into two categories: observers and presenters. The observers will have 20 minutes to do a gallery walk around the classroom and visit the stations with presenters. The presenters will have 20 minutes to provide their audience with informative and interesting facts about the bacterial infection/virus they’ve been examining. After the first 20 minutes are over, have groups switch their roles and hold another set of presentations.

4. After the presentations give students time to share any thoughts and/or questions.

EDUCATOR’S NOTE: Global Voices is a weekly column written by Craig and Marc Kielburger that explores local and global social issues, and offers additional elementary and secondary school resources. Visit www.WE.org/we-schools/columns/global-voices to find articles and resources online.

EDUCATOR’S NOTE: Prior to introducing the final activity, ensure there is at least 20 minutes left before the end of class to clarify any questions students may have.
CONCLUDING LESSON:
CLEAN WATER AND SANITATION

Objective: Students will apply knowledge of the relationship between water and sanitation and personal hygiene in order to create a skit of a handwashing technique that demonstrates this important relationship in a clear and thoughtful way.

COMMON CORE CONNECTIONS:
CCSS.ELA-LITERACY.CCRA.W.5 (Writing)
Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.
CCSS.ELA-LITERACY.CCRA.SL.1 (Speaking and Listening)
Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

Instructional method(s): Brainstorming, class discussion, group work, drama, presentation

Differentiated instruction:
• Show younger students an instructional video to demonstrate the proper way to wash their hands

Course connections: Health and Physical Education, English Language Arts

Estimated time: 70 minutes

Special materials: Medium-sized bucket, soap, paper towels

Action Plan

Steps:
1. To begin, ask students a series of yes/no questions. Students will stand up to respond “yes” or remain seated to respond “no.” Discuss the correct answer for each.
   • Do you know what personal hygiene means? (Yes/No)
   • Is washing your hands personal hygiene? (Yes/No)
   • Is soap needed to practice personal hygiene? (Yes/No)
   • Do you need soap to wash your hands? (Yes/No)
   • Do you need to wash your hands after using the toilet? (Yes/No)
   • Should you wash your hands before eating? (Yes/No)

2. Hold a brief discussion with students using the following questions:
   • What is the impact of personal hygiene on health?
   • What do we take for granted that help protect us from harmful bacteria?

3. Place the bucket, soap and paper towels at the front of the classroom. Ask for a volunteer to help demonstrate the correct way to wash hands. Instruct the volunteer to:
   • Wet hands with warm water
   • Lather hands with soap by rubbing them together for at least 20 seconds (or for the time it takes to sing the entire Happy Birthday song)
   • Rub palms together and scrub the backs of hands, between the fingers and under the fingernails
   • Rinse, or in this case, dip hands into bucket to remove all lather
   • Dry hands well using paper towel

4. Write the title “Clean Water and Sanitation” on the board and ask students:
   • What do you think is the relationship between water and sanitation?
   • How might the consumption of contaminated water affect the health of a community?
   • If you were to wash your hands with water contaminated with harmful bacteria and waste, is that a good practice of personal hygiene? How might you be affected?

5. Read to students the following scenario:
   As a class we traveled to a developing country to visit a local community that lacked access to clean water. We met with the locals and proposed a plan to drill a water well to reach the clean water buried deep below the ground’s surface. With the combined effort of the local people and our group, we successfully provided a new clean water source to be shared amongst the locals. Or, show students “A Water Walk in Kenya” vimeo.com/freethechildren/review/208514439/7d724b3fdb (5:38).

6. Based on the scenario above, ask students:
   • Do you think access to clean water will stop the spread of waterborne illnesses in the community? Why or why not?
   • Did the water project help with the current water crisis? If so, how? Will it minimize the impact of waterborne illnesses?
   • After achieving access to clean water, what should the next steps be? (Answer: Correct training of personal hygiene practices.)

7. Explain to students that waterborne diseases will continue to spread if the local community does not receive the personal hygiene and sanitation training needed to use the new water source correctly. Without education, the benefits of clean water will go unnoticed.

8. Ask students to work with a partner to create a skit of a handwashing technique they could use to teach adults and children in developing communities, keeping in mind language might be a barrier. After a few minutes, allow groups to present their skits.

EDUCATOR’S NOTE: In preparation for the activity, fill a medium-sized bucket with warm water and have soap and paper towels available.
9. After all of the skits have been presented, introduce students to the WE Villages model. Tell them that WE Villages is a holistic development model designed to eliminate the obstacles preventing children from accessing education and to help break the cycle of poverty. WE Villages has Pillars of Impact that provide the support an entire community needs for long term sustainability and development. The pillars are:
   i. Education
   ii. Water
   iii. Health
   iv. Food
   v. Opportunity

10. Post a map of the world for all students to see. Point out and place a sticky note on top of each of the following countries. Tell students that these are the eight countries WE Villages currently operates in:
   • Kenya
   • Sierra Leone
   • Ecuador
   • Haiti
   • India
   • Nicaragua
   • Rural China
   • Tanzania

11. Show the following video to help students better understand the WE Villages model: player.vimeo.com/video/71444171.

12. Inform students that the Water pillar focuses on improving access to clean water and sanitation facilities, while also implementing programs to increase the practice of healthy habits and clean water usage. Ultimately this will lead to a long-term change in a community, with fewer incidences of water-related illnesses.

13. Show students the following short film to give a better insight on how access to clean water and adequate sanitation facilities can affect the livelihood of people in developing communities:

14. Provide students with the following link to learn more about the Water Pillar and discover what they can do to help:
   www.WE.org/we-villages/water/.

For younger students:
The following is an alternate activity to learn more about WE Villages.

Divide students into eight groups and assign one WE Villages country to each group. Tell students that they have been chosen to be ambassadors for the respective WE Villages country. As a WE Villages ambassador students will provide the class with the following:
   • Why did WE Villages begin working in your country?
   • What are WE Villages goals in your country?
   • What does the WE Villages model look like in your country?

Students can find all of the information they need for their presentations at www.WE.org/we-villages/where-we-work/.

Let us know what you think. We are always working to make our educational resources better for teachers and students. Answer the short survey and help shape the educational content we offer.

Water pillar: www.surveygizmo.com/s3/2447479/CWS

Connect with your WE Schools Coordinator or contact weschools@we.org for fundraising posters and more information on the Water pillar.
Additional Resources

In addition to the lesson plans, share these resources with your students:

- Free The Children's WE Villages story: www.WE.org/we-villages/story/
- WE Villages Water Pillar: www.WE.org/we-villages/water/
- National Geographic: Freshwater Crisis: environment.nationalgeographic.com/freshwater/freshwater-crisis/
- One.org: Issues: www.one.org/us/issues/
- TIME: World Water Crisis: content.time.com/time/photogallery/0,29307,1724375_1552659,00.html
- UN Water: www.unwater.org/
ASSESSMENT RUBRIC

This assessment rubric is based on Bloom’s taxonomy, a multi-tiered model to classify cognitive levels of complexity to evaluate students’ comprehension of issues and participation with the lessons.

<table>
<thead>
<tr>
<th></th>
<th>Level 1: 50-59%</th>
<th>Level 2: 60-69%</th>
<th>Level 3: 70-79%</th>
<th>Level 4: 80-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KNOWLEDGE AND COMPREHENSION</strong></td>
<td>Demonstrates limited knowledge and understanding of the relationships among facts, ideas and concepts</td>
<td>Demonstrates some knowledge and understanding of the relationships among facts, ideas and concepts</td>
<td>Demonstrates considerable knowledge and understanding of the relationships among facts, ideas and concepts</td>
<td>Demonstrates thorough knowledge and understanding of the relationships among facts, ideas and concepts</td>
</tr>
<tr>
<td><strong>APPLICATION AND ANALYSIS</strong></td>
<td>Uses critical and creative thinking processes and develops examples with limited effectiveness</td>
<td>Uses critical and creative thinking processes and develops examples with some effectiveness</td>
<td>Uses critical and creative thinking processes and develops examples with considerable effectiveness</td>
<td>Uses critical and creative thinking processes and develops examples with a high degree of effectiveness</td>
</tr>
<tr>
<td><strong>SYNTHESIS AND EVALUATION</strong></td>
<td>Demonstrates knowledge and makes connections with limited effectiveness</td>
<td>Demonstrates knowledge and makes connections with some effectiveness</td>
<td>Demonstrates knowledge and makes connections with considerable effectiveness</td>
<td>Demonstrates knowledge and makes connections with a high degree of effectiveness</td>
</tr>
<tr>
<td><strong>ORGANIZATION AND COMMUNICATION</strong></td>
<td>Expresses and organizes information while using appropriate language for different audiences and purposes with limited effectiveness</td>
<td>Expresses and organizes information while using appropriate language for different audiences and purposes with some effectiveness</td>
<td>Expresses and organizes information while using appropriate language for different audiences and purposes with considerable effectiveness</td>
<td>Expresses and organizes information while using appropriate language for different audiences and purposes with a high degree of effectiveness</td>
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</table>
Group members: _____________________________________________________________________________________________

Each member of your group has one 5-gallon (80-cup) pail of water to use for the whole day. Combined, you have a total of 20 gallons (320 cups) of water. Below is a list of tasks that you could use your water for. As a group, decide how much water you will use for each task.

- The needs of each member of the group must be met.
- The total amount of water at the end cannot be more than 20 gallons (320 cups).
- You may choose to give a task no water if you feel it is unnecessary.
- Use the available measuring cups, pails and water to see what specific amounts of water actually look like.

### Blackline Master 1: Water Challenge

<table>
<thead>
<tr>
<th>TASK</th>
<th>RECOMMENDED MINIMUM AMOUNT PER PERSON</th>
<th>RECOMMENDED NUMBER OF TIMES PER DAY</th>
<th>TOTAL AMOUNT FOR 4 PEOPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking a meal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing hands (once)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing dishes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watering garden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: _____ cups
       _____ gallons
## Blackline Master 2: Water Challenge Recommendations

<table>
<thead>
<tr>
<th>TASK</th>
<th>RECOMMENDED MINIMUM AMOUNT PER PERSON</th>
<th>RECOMMENDED NUMBER OF TIMES PER DAY</th>
<th>TOTAL AMOUNT FOR 4 PEOPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water</td>
<td>8 cups/person</td>
<td>1</td>
<td>32 cups</td>
</tr>
<tr>
<td>Cooking a meal</td>
<td>2 cups/person</td>
<td>3</td>
<td>24 cups</td>
</tr>
<tr>
<td>Washing hands (once)</td>
<td>2 cups/person</td>
<td>5</td>
<td>40 cups</td>
</tr>
<tr>
<td>Bathing</td>
<td>40 cups/person</td>
<td>1</td>
<td>160 cups</td>
</tr>
<tr>
<td>Washing dishes</td>
<td>6 cups/person</td>
<td>3</td>
<td>72 cups</td>
</tr>
<tr>
<td>Laundry</td>
<td>80 cups/load</td>
<td>1</td>
<td>320 cups</td>
</tr>
<tr>
<td>Watering garden</td>
<td>80 cups</td>
<td>1</td>
<td>80 cups</td>
</tr>
<tr>
<td><em>Note: if you have animals, such as a goat and three chickens, you also need to give them water</em></td>
<td>12 cups/goat 2 cups/3 chicken</td>
<td>14 cups</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL: 742 cups  
47 gallons  
10 pails (of 5 gallons each)
# Blackline Master 3: Tracking Your Water Usage

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>AMOUNT OF WATER USED</th>
<th>TIME</th>
<th>TIMES</th>
<th>TOTAL AMOUNT OF WATER USED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GAL= GALLONS C= CUPS</td>
<td>(MINUTES)</td>
<td>PER DAY</td>
<td></td>
</tr>
<tr>
<td>Drinking water</td>
<td>0.0625 Gal</td>
<td>1 C</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Washing hands</td>
<td>1.875 Gal/min</td>
<td>30 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking a shower</td>
<td>3.75 Gal/min</td>
<td>60 C/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old shower head</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newer shower head</td>
<td>2.375 Gal/min</td>
<td>38 C/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking a bath</td>
<td>5 Gal/person</td>
<td>80 C/person</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Brushing teeth</td>
<td>1 Gal/min</td>
<td>16 C/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flushing toilet</td>
<td>2.75 Gal</td>
<td>44 C</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Old toilet model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newer toilet model</td>
<td>5.51.375 Gal</td>
<td>22 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing dishes by hand</td>
<td>3.75 Gal/min</td>
<td>60 C/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old faucet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newer faucet</td>
<td>1.875 Gal/min</td>
<td>30 C/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running the dishwasher</td>
<td>18.75 Gal/load</td>
<td>300 C/load</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Doing a load of laundry</td>
<td>23.75 Gal/load</td>
<td>380 C/load</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Watering the lawn or garden</td>
<td>1.875 Gal/min</td>
<td>30 C/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing Car</td>
<td>94.5 Gal</td>
<td>1,512 C</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>At home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At car wash</td>
<td>42.5 Gal</td>
<td>680 C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE RIGHT TO CLEAN WATER
PUBLISHED APRIL 2, 2012

Standing before the massed representatives at the United Nations, Bolivian Ambassador Pablo Solon raised one hand and slowly snapped his fingers – once, twice, three times. Then he held up one finger. With that quiet gesture, he hammered home his point: every three and a half seconds, somewhere in the developing world, one child dies of a water-borne disease. “Water is life,” he said. “As my people say, ‘Now is the time.’”

On that day, July 28, 2010, the UN recognized water to be a universal human right. But 41 out of 163 countries abstained from the vote. One of those countries was ours. For over a decade, Canadian governments have opposed the recognition of water as a basic human right. We struggle to understand why. Without clean water to drink we will die in as little as two days.

Dirty water is every bit as deadly as no water at all. The World Health Organization estimates that 3.5 million people die every year of water-borne diseases. When Ambassador Solon spoke to the UN General Assembly, he explained that half the world’s hospital beds are occupied by people suffering from illness caused by unclean water. Water is so vital that each day women around the world spend an estimated 200 million hours hauling it for their families. Access to something so essential should be a human right. Unfortunately that opinion is not universal, as our government shows us through their continued actions.

What does recognizing clean water as a human right mean for countries?

Maude Barlow, Chair of the Council of Canadians, says in her essay Our Right to Water that when water is a human right it creates three obligations for a nation: the obligation to respect, the obligation to protect, and the obligation to fulfill. The obligation to respect means the government can’t take action or make a policy that interferes with its citizens’ right to water. So, for example, no one can be denied water for drinking and sanitation because they cannot afford water fees or taxes.

The obligation to protect means that countries must ensure no one else interferes with the water rights of their citizens. For example they must not allow private companies or local governments to pollute water supplies or prevent citizens from accessing water.

The obligation to fulfill means that countries must take any additional steps necessary to meet their citizens’ need for water. That could mean, for example, improving or increasing public water systems.

Last month, Canada was one among many countries that sent representatives to Marseilles, France, for the World Water Forum, the largest international gathering on water issues. The February forum was the first since the 2010 UN declaration on water. Officials from international organizations and many countries arrived in Marseilles pushing for the Forum to follow the UN and affirm clean water as a human right.

Amnesty International and the Council of Canadians were among the organizations in Marseilles, watching Canada in action. In their reports from the conference, they have singled out Canada as a leading force using backroom lobbying and pressure to water down the language of the Forum declaration.

According to Amnesty International, rather than declaring water a human right that must be respected by all nations, the statement offers vague language that allows countries to decide for themselves whether they have an obligation to extend the right to water to their citizens. This would leave countries like Canada free to ignore the right to water when they find it inconvenient.

Why is Canada resistant to recognizing clean water as a human right? Perhaps because were we to do so, we would have to face the fact that our country, a world leader in fighting for human rights, is denying a human right to hundreds of thousands of our own people.
Right now in Canada, 112 First Nations communities are living under drinking water advisories that require them to boil their tap water, or avoid drinking the water completely, because of contamination.

Canada is failing its obligations to protect and fulfill the human right to water in aboriginal communities, and even some non-aboriginal rural communities.

We believe most Canadians see clean water as their intrinsic right. Witness the years of public outrage and backlash that followed the case of water contamination in Walkerton, Ontario, that led to seven deaths and thousands of cases of illness in 2000.

None of us would long tolerate having our access to clean water cut off. It’s time for us as a nation to recognize the right we take for granted is a universal human right that extends to all.
Research and Presentation

Each presentation should include the following information:

Facts:
- What is the name of the waterborne disease?
- What bacteria or virus causes it?
- How does the disease spread?
- How can it be removed from the water supply?
- Have there been any recent outbreaks?

Summary:
- Provide a brief summary of the history of the disease.

Symptoms:
- What are common symptoms of the disease?
- Is it contagious?
- What is the treatment?
- Is it preventable? If so, how can it be prevented?

Location:
- Where does the waterborne disease occur around the world?

Images:
- Provide images of the disease organism.

Links for more information