

# Safe Water Curriculum Lesson Package

Opening the eyes of Canadian students to the work of Samaritan's Purse around the world. For Grades 9-12



Dear Educator,

Thank you for opening up this lesson package and taking the first step toward opening the eyes of the children you teach to the local and global issues around them. We hope that the experience of learning through these lessons would be a blessing to you and your students.

Samaritan's Purse is a Christian relief and development organization that, like that Good Samaritan in the Bible, provides aid to hurting people- in this case victims of war, disease, disaster, poverty, famine, and persecution. We do it regardless of their religious faith, race, gender, or socio-economic standing. We usually partner with local churches and we continue to nurture that partnership, and monitor the effectiveness of our work.

Samaritan's Purse Canada has been doing essential relief and development work in Jesus' Name all around the world since 1973. Our Emergency Disaster Relief programs provide urgently needed assistance including food, water, and temporary shelter. We meet critical needs and give people a chance to rebuild their lives here in Canada and around the world. As well, through our Water Projects, we are providing life-saving clean water and essential health and hygiene training to hundreds of thousands of people in the developing world.

The lesson set that follows offers Canadian children a glimpse into the lives and issues of people around the world with a specific focus on water. Some of the lessons have science and technology sections, others link to social studies, health and wellness. All of the lessons are designed to impact a student's world-view and hopefully encourage them to actively engage with the wider world and make a difference.

Teachers, we urge you to make these lessons your own. Use what works, leave the parts that are too difficult for your age group, and let us know what you think. We want this resource to be easy to use, and for teachers to use it. And if you have other resources that you have developed, or create some supplementary lessons that fit well within this set – we would love to know and share your successes with more Canadian teachers. Please contact Ron Orcajada ([water@samaritan.ca](mailto:water@samaritan.ca)) at Samaritan's Purse to give us feedback.

Sincerely,



Franklin Graham



**SUBJECT(S):** Science, Social Science, Mathematics

**THEMES EXPLORED:** The Need for Clean Water; The Right to Water; Water Usage around the world; The BioSand Water Filter and other options for filtering/cleaning water; Health, Wellness and Water; Water Source Protection, Hygiene and Sanitation.

**AMOUNT OF TIME:** 12 hours +

**KEY QUESTIONS:**

What is the importance of clean water?

What makes water clean (potable)?

Should everyone have The Right to Clean Water?

What are the effects of drinking dirty water and why?

What are common waterborne diseases?

What is the BioSand Water Filter and how does it work?

What are the alternative methods for cleaning water in developing countries?

How does Samaritan's Purse encourage health and wellness in addition to helping families build BioSand Filters?

What is source water? Why and how should people protect their source water?

**KEY WORDS:** diarrhea, sanitation, hygiene, contamination, BioSand Filter, waterborne diseases, open defecation, source water, potable water

**NOTES:** Although this lesson set is designed for the classroom, many activities can be easily modified for a less formal setting (i.e. Sunday School, Youth Group, clubs, etc.).

## Assessment

As an educator in the classroom you are the expert on your students' individual learning styles and abilities. We rely on you to tailor the following lessons to your students to ensure successful and en-gaging lessons. Feel free to use the parts that make sense, and leave out activities that you know won't work well. Then, we would really appreciate your feedback! Tell us what works and what didn't work – then we can improve the lessons for other educators and students.



## Lesson 1: An Introduction to Water

**CURRICULUM CONNECTIONS:** Grade 9-12 Social Studies and Science

**INSTRUCTIONAL METHODS:** Carousel Questions, Quiz and Poll, Video, Exit Pass

**ESTIMATED TIME:** 75 minutes

**LEARNING OBJECTIVES:**

- Students develop an awareness of water issues around the world
- Students introduced to Samaritan's Purse Canada's work in developing countries

**NOTE TO TEACHERS:** Use this lesson to begin your study of water and water issues. It is introductory, very interactive and gets students thinking more broadly about water in Canada as well as around the world.

### MATERIALS

Chart Paper

Markers (four different colors)

Projector or TV to play video

Paper for students to write their "Exit Pass" on

*Optional – print out water quiz to save time*



## A) Explore (25 minutes)

### CAROUSEL QUESTIONS:

1. Where do we get water from? (Lakes, oceans, ponds, rivers, streams, rain, the tap, etc.)
2. What is water used for? (Drinking, cleaning, bathing, growing plants/grass, making food, watering animals, swimming, used in cars, factories to make pretty much everything, heating and cooling, etc.)
3. What are the effects of not having enough water? (Thirsty, hungry, dehydration, drought, famine, plants die, animals die, etc.)
4. Can water make you sick? How? (Yes. If water isn't cleaned properly and stored well it can contain diseases that can make you very sick – like E. Coli, Giardia (beaver fever), viruses, parasites, etc.)
5. What other facts do you know about water? (Liquid, can be salty or fresh, can swim/float in it, separates from oil, solid when frozen (ice), gaseous when gets really hot, water cycle, various substances dissolve in it, etc.)

**REVIEW** the brainstorming that the students completed on the chart paper.

**FOLLOW-UP QUESTIONS:** Do you feel like you always have enough water to drink? Is your water clean? Have you ever drank water straight out of a pond, lake or river?

## B) Watch video and Discussion (20 minutes)

**WATCH VIDEO:** [Proving a Point \(Turn on the Tap\)](#) (6:01 min)

### DISCUSSION QUESTIONS:

1. Would you like to drink water from the pond that Mum Somal gets water from? What do they use that water for? (Drinking, washing, cleaning dishes, bathing, laundry, etc.)
2. What are the Health effects of drinking pond water? (People get sick from waterborne illnesses, which requires health care (very expensive), some children and elderly die from diarrhea, many families fall into more desperate poverty because of expensive health care bills.)
3. What are some of the results of not having enough clean water to use – for drinking, bathing, washing dishes, washing hands, watering garden, etc.?

### **Teaching Strategy:**

Carousel Questions – In this activity, students work in small groups (divide the class into 5 groups) and move from question to question, discussing as they go. Each group begins at a different question. The teacher sets a timer, and students stay at each question for a set period of time (about 1-2 minutes works well). Students read the question, skim over any previous answers by other groups, and then add their own ideas to the paper in their own marker colour. When the timer goes off, they move to the next question.

### **Note to Teacher:**

Before the class, write the questions on 5 different pieces of chart paper. Post in 5 different places in your classroom.

## C) The Big Picture (20 Minutes)

### WATER AROUND THE WORLD QUIZ

How many children die each day around the world after getting sick from contaminated water? **4,500**

How many people in developing countries don't have access to safe water? **884 million**

How many people in developing countries don't have toilets? **2.4 billion**

How many hours do women in Africa spend carrying water from rivers, lakes and wells to their homes every day? **200 million**

a) 1 million    b) 15 million    c) 40 million    c) 200 million

How much water do most people in Canada use each day on average? **330 liters**

a) 20 liters    b) 114 liters    c) 225 liters    c) 330 liters

How much water do most people in developing countries use each day on average? **20 liters**

### DISCUSSION QUESTIONS:

1. Were you surprised by any of the statistics? Which was the most shocking?
2. What factors are contributing to the world water crisis? (Lack of governance in many developing nations, lack of education, industry, lack of laws that protect water sources, poverty, etc.)
3. In what ways would your life be different if you lived in a different place and didn't have easy access to clean drinking water?
4. How does contaminated drinking water affect families' lives in the developing world? How does it affect children especially?

## D) Strategy for Assessment (10 minutes)

**EXIT PASS:** this assessment strategy uses small index cards (or just a piece of paper). Teachers put a question on the board to be answered before leaving class. Students must answer the question in two or three sentences on their card or paper and hand it to the teacher on the way out.

**QUESTION:** Should access to clean water be a human right? Why or why not?

## MINISTRY MOMENT:

In the Bible days, most people had to walk for their water. If they lived near a river or lake, they might get their drinking water from there and maybe also bathe in that same water. If they had farm animals, those animals might drink or bathe from that river or lake as well, which could make the people sick because the animals might have diseases or bad germs that could get into the water.

If people didn't live near rivers or lakes, they would probably be in villages with just one well providing water for everyone. That was the situation in the Bible when Jesus met a woman at a village well and changed her life by revealing He was the Son of God. But if they didn't live in a village, they might have to walk many hours every day to find and bring water – sometimes, dirty, contaminated water – back to their homes.

All that may seem like a long time ago, but millions of people still live like the people in the Bible. In many places like Africa, they still have no running water in their homes, and they still have serious droughts where there isn't enough water to drink or take a bath.

Even if there is enough, they still have no easy way to water their dry fields, still get drinking water from polluted rivers or lakes, and/or must walk a long way to find it and bring it back to their homes.

### *Read this passage with students:*

Have students write a reflection based on the following questions as a guide:

1. Imagine your life without running water (like in the Bible times)—no indoor plumbing, no shower or bath. How would your life be different than it is right now? Think of the immediate impacts and the broader ones if you can.
2. Samaritan's Purse offers water filters, wells and other methods of water treatment to people 'in Jesus Name'. Why, according to John 4:1-14, is it important to provide clean water as well as share the news of Jesus with people?

### *Jesus Talks With a Samaritan Woman*

*Now Jesus learned that the Pharisees had heard that he was gaining and baptizing more disciples than John—<sup>2</sup>although in fact it was not Jesus who baptized, but his disciples. <sup>3</sup>So he left Judea and went back once more to Galilee. <sup>4</sup>Now he had to go through Samaria. <sup>5</sup>So he came to a town in Samaria called Sychar, near the plot of ground Jacob had given to his son Joseph. <sup>6</sup>Jacob's well was there, and Jesus, tired as he was from the journey, sat down by the well. It was about noon.*

*<sup>7</sup>When a Samaritan woman came to draw water, Jesus said to her, "Will you give me a drink?"<sup>8</sup> (His disciples had gone into the town to buy food.)*

*<sup>9</sup>The Samaritan woman said to him, "You are a Jew and I am a Samaritan woman. How can you ask me for a drink?" (For Jews do not associate with Samaritans.[a])*

*<sup>10</sup>Jesus answered her, "If you knew the gift of God and who it is that asks you for a drink, you would have asked him and he would have given you living water."*

*<sup>11</sup>"Sir," the woman said, "you have nothing to draw with and the well is deep. Where can you get this living water?"<sup>12</sup>Are you greater than our father Jacob, who gave us the well and drank from it himself, as did also his sons and his livestock?"*

*<sup>13</sup>Jesus answered, "Everyone who drinks this water will be thirsty again, <sup>14</sup>but whoever drinks the water I give them will never thirst. Indeed, the water I give them will become in them a spring of water welling up to eternal life."*

*—John 4: 1-14 New International Version (NIV)*