



Lesson Plan #1

The Miracle Called Water

Part 1.1 – Introduction

Teacher: Does anyone know how much of the human body and the earth are made of water?

(Let children discuss, put their estimates on the board...About 70% of the body is made of water, and 70-75% of the earth's surface is covered by water.)

Water is one of the most precious resources on earth. We all need water to survive. In Canada, we are very fortunate. We simply turn on our taps and clean water comes out. We take it for granted.

But not everyone on earth has the same access to water. I want to tell you a story about a boy named Haruna.

Haruna is 10 years old. He lives in Africa in a country called Ghana. His village is called, "Gundaa". Every morning Haruna goes to the local pond to get water for his mother. He walks for more than 20 minutes to get to the pond. When he gets there, he sees his neighbour scrubbing dirty clothes – he waves and pushes aside a stubborn cow so he can dip his pail in the water. He grimaces as the bucket fills up with brown water. Sadly, children like Haruna are forced to drink this bacteria-infested water – there is nothing else. Many miss school due to diarrhea, cholera and even guinea worm. These diseases can be deadly. Haruna can only hope he doesn't get sick.

Can you imagine what it would be like to drink that kind of water?

Part I.2 – Activity

Supplies Needed: 4 clear glass jars, red food colouring

Teacher: We've just heard Haruna's story of how his community's water was contaminated. That very water can be deadly. In fact 5,000 children die each day as a result of diarrheal diseases that are largely because of problems with water.

But how does contamination happen? How does bacteria and disease work its way into the water supply? We're going to see with a simple experiment.

Divide class into 4 groups and give them each a jar filled with water. Let each group drop food-colouring into the water.

Teacher: The drop of food colouring you will put into your jar of water represents bacteria or disease. Watch what happens when I let just one drop of food colouring in the water (drop food colouring in and watch jar begin to colour).

Give time for class to watch as the water turns different colours.

Teacher: What do you see? (the water should be tainted with the colour they used) Contamination in water works the same way. What do you think it would do to the water if you washed a cow or a horse in your water, or a community took their baths in the water? Would you want to drink it?

(Open group and class discussion brainstorming answers to the questions below...put questions on the board or overhead)

Group Questions:

- 1) How can communities with people like Haruna stop their water from getting polluted?
- 2) Where can they get fresh water?
- 3) What can we do to help people like Haruna?

Teacher: I'd like you to take 5 minutes in your group and come up with some ideas to these questions...(Wait 5 minutes) Take up answers, putting their responses on the board.

What can be done?

Christian Children's Fund of Canada is working directly with partners around the world to help children and their families gain access to clean drinking water. One way they do this is by constructing harvesting tanks in villages to collect fresh water. When the rain water comes, the water can be stored and kept in these tanks away from animals and human waste. This keeps the water safe. This simple water technology goes a long way in preventing sickness in children like Haruna.

Other solutions around the world are:

- Protected dug wells
- Protected springs
- Public stand pipe for drinking
- Borehole water well



www.ccfcanada.ca
Call 1-800-263-5437

Charitable Registration #10691 8543 RR0001

What can you do?

- Learn more about Christian Children's Fund of Canada at <http://www.ccfcanada.ca/>
- Do a report or project on wells, springs, or borehole water wells
- Talk to your parents about sponsoring a child
- Use your water carefully at home and try not to waste water
- Pray for those around the world who don't have water

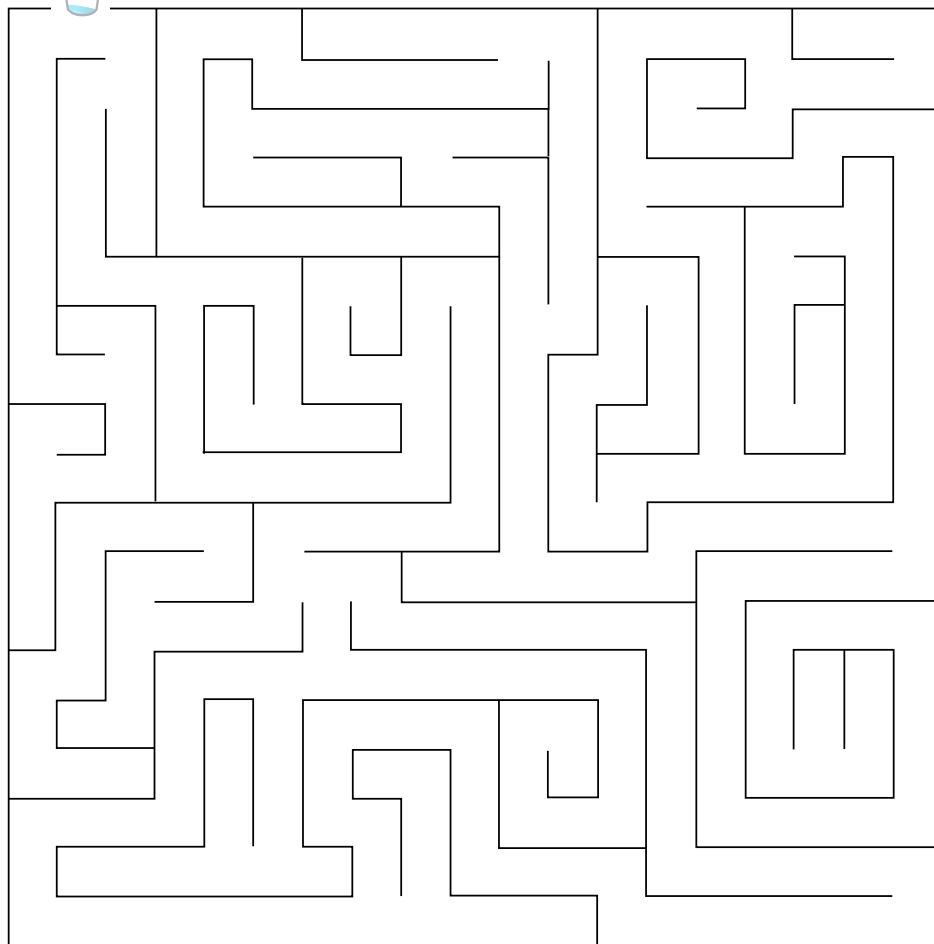


Rainwater Harvesting Tanks like this one give safe clean water to communities in need.

Rainwater Harvesting Tanks collect water that falls during rainstorms. When the water enters the tank it immediately goes through a filtration process where all the dirt, pollution and contaminants are taken out of the water. Then the safe, clean water is stored in a part of the tank set apart from the water collection chamber so it cannot become re-contaminated. Enough water can be collected in one Rainwater Harvesting Tank to meet an entire community's needs for one whole year. Because a community has access to clean water, they no longer need to use the bacteria-infested water of the nearby streams and ponds to wash and cook in or to drink from. Children who constantly suffered illness from drinking the dirty water can be healthy because they finally have another option for the water they drink.

The Miracle Called Water

Help fill a child's cup with clean safe water.



Quick Facts:

- 2.6 billion people do not have access to improved sanitation
- Over 1 billion do not have improved drinking water
- 5,000 children die each day as a result of diarrheal diseases
- Something as simple as clean drinking water can reduce diarrhea by as much as 39%