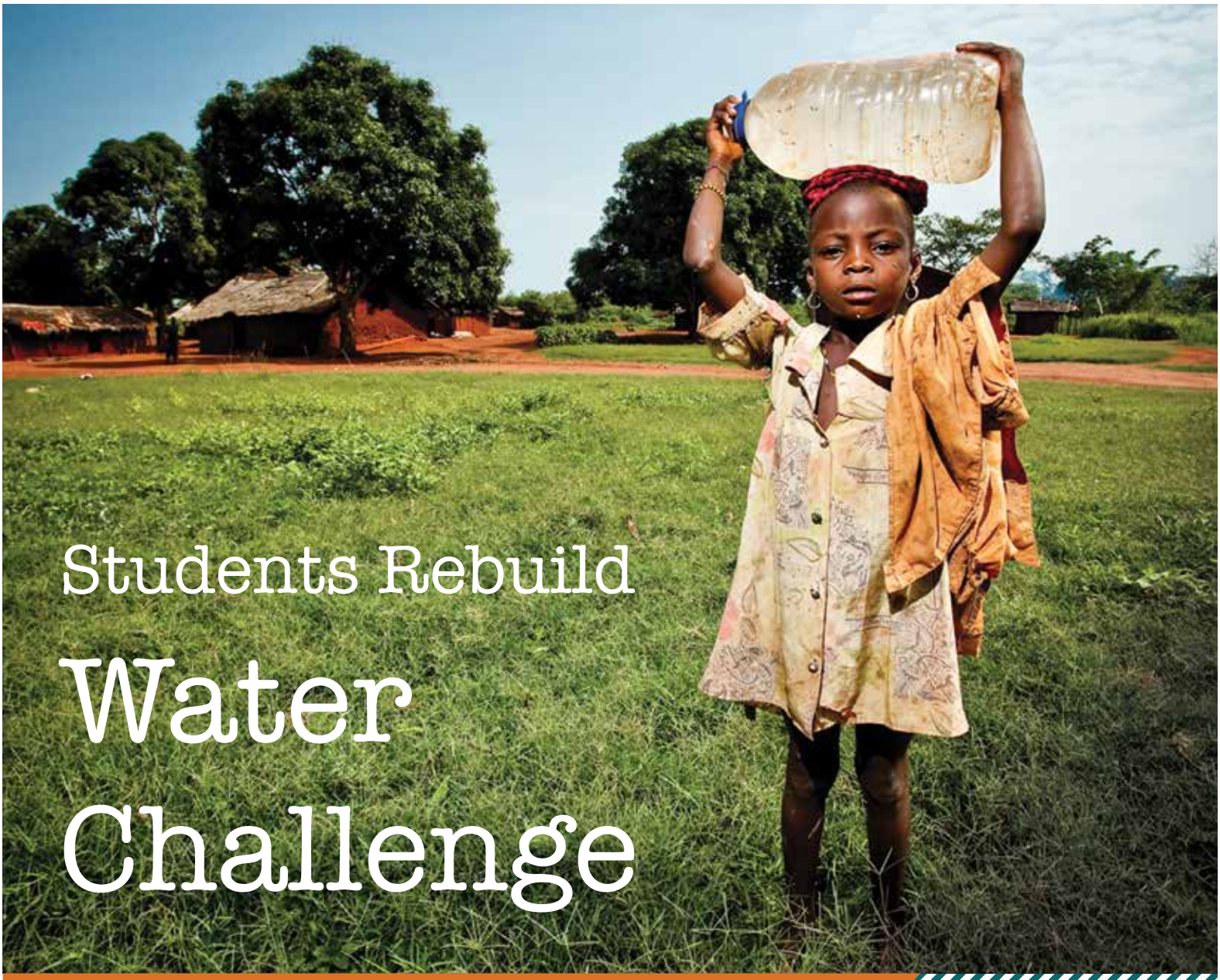

Students Rebuild

Water Challenge

Curriculum

GLOBAL NOMADS GROUP

charity: water

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Students Rebuild Water Challenge

Curriculum

The Students Rebuild Water Challenge, in partnership with charity: water and Global Nomads Group, will help to bring clean, safe drinking water to those who need it most. This brief curriculum will introduce your students to the international water crisis and the ways they can get involved in making a difference.

> "We never know the worth of water till the well is dry."
>
> —Thomas Fuller

Subjects: Earth Science, Health, Social Studies, Art

Time: Three days to complete

Common Core State Standards English Language Arts:

1. Speaking and Listening: Comprehension and Collaboration (SL.9-10.1, SL.11-12.1)
2. Writing: Research to Build and Present Knowledge (WHST.6-8.7, W.9-10.7, W.11-12.7)

National Council for Social Studies' National Curriculum Standards Middle and High School:

1. Understand that science, technology, and their consequences are unevenly available across the globe.
2. Use diverse types of media technology to read, write, create and review a variety of messages.
3. Understand that the solutions to global issues may involve individual decisions and actions, but require national and international approaches.
4. Understand that individuals, organizations, nations, and international entities can work to increase positive effects of global connections and address the negative impacts of global issues.
5. Identify concerns, issues, conflicts, and possible resolutions related to universal human rights issues.

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Students Rebuild Water Challenge

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	ACTIVITY	ESTIMATED TIME
LEARN	**Acquiring Background Knowledge** Activity 1: The Global Water Crisis Activity 2: Water Walk Activity 3: Taking a Closer Look— Tanzania Case Study/Calculate Personal Water Use Activity 4 (Optional): Webcast	 45 minutes 45 minutes 45 minutes 60 minutes
ACT	**Take the Challenge!** Activity 1: Make Beads Download Student Toolkit	60 minutes
REFLECT	**Share Your Message!**	20 minutes

LEARN

The Global Water Crisis

Overview

Water: it's life's most basic need. But there's a water crisis in our world. It has many complex parts that are all related: drinking water scarcity, food insecurity, declining ocean health, gender inequality, and climate change— just to name a few.

Nearly 800 million people in the world live without clean water. Unsafe water and lack of basic sanitation kill more people each year than all forms of violence combined-- including war. **The water crisis is extensive, but we can face it together.** And you can be part of the solution.

Activity 1: The Global Water Crisis

1. Watch the video, "Water Changes Everything."

www.youtube.com/watch?v=VieZ3hqztlE&feature=c4-overview-vl&list=PLtaayxEPf2h4zsZsX6yBdQsaRi9Gr0bGR.

2. Use the video and your background knowledge to answer the following questions:

a. Approximately how many people live without clean drinking water?

b. Where is the water crisis occurring?
c. What is impacted by the water crisis?
d. What are some examples of things that women and children miss out on by spending time gathering water?
e. What makes the walk to get water challenging?
f. What could happen if someone drinks contaminated water?
g. Who is most affected by germs from dirty drinking water?
h. What are solutions to the water crisis?

For older students:

i. Why are so many developing nations experiencing a water crisis at the moment?
j. What social and environmental factors do you think are contributing to the global water crisis?
*Visit http://pulitzercenter.org/downstream to learn more.

3. Further reflection (for discussion or written response):

a. Several trans-national organizations, including the United Nations and The World Bank, are currently addressing the water crisis. Select one to research and report out on how they are tackling this issue.
b. Look up recent articles on water filtrations systems and other water innovations currently being developed and used in the field. What new systems and innovations seem the most promising, and most practical, to be used in the nations currently suffering the water crisis?

Water Walk[1]

ALMOST ONE BILLION PEOPLE ON THE PLANET DON'T HAVE ACCESS TO SAFE AND CLEAN DRINKING WATER.

THIS IS A JERRY CAN. TO US IT SAYS "GASOLINE" BUT FOR THE ALMOST BILLION PEOPLE ON THE PLANET, THIS REPRESENTS WATER. IT WEIGHS 40 POUNDS WHEN FULL, AND PEOPLE ALL OVER THE WORLD WALK UP TO 3 HOURS EACH DAY CARRYING IT. THE WATER THEY BRING HOME TO THEIR FAMILIES OFTEN MAKES THEM SICK. WOMEN AND CHILDREN ARE RESPONSIBLE FOR THIS DAILY TASK, WHICH PREVENTS THE KIDS FROM GETTING AN EDUCATION, AND THE WOMEN FROM EARNING A MUCH NEEDED EXTRA INCOME. WE BELIEVE WATER IS A BASIC HUMAN RIGHT, AND WE'RE DOING SOMETHING ABOUT THAT. CHARITY: WATER IS A NON-PROFIT WORKING TO BRING CLEAN, SAFE DRINKING WATER TO PEOPLE IN DEVELOPING NATIONS. WE GIVE 100% OF THE MONEY RAISED TO DIRECT PROJECT COSTS, FUNDING SUSTAINABLE FRESHWATER SOLUTIONS FOR PEOPLE IN NEED.

WATER.

20 PAPER BEADS GIVES ONE PERSON ACCESS TO CLEAN WATER.

START BY HELPING ONE. JOIN THE STUDENTSREBUILD.ORG WATER CHALLENGE TO BENEFIT CHARITYWATER.ORG.

[1] Global Concerns Classroom, A Walk in Citoya's Shoes.

Students Rebuild Water Challenge

Curriculum

Overview-

In this activity, students will take part in their own “Water Walk” to experience for themselves some of the difficulties their peers face on a daily basis when collecting clean water

Activity 2: Water Walk-

1. Explain to students that they will participate in an activity to learn how the water crisis affects women and children around the world. State the following:

   > “Almost one billion people on the planet don’t have access to safe and clean drinking water. This is a jerry can. To us it says ‘gasoline,’ but for almost a billion people on the planet, this represents water. It weighs ***40 pounds*** when full, and people all over the world walk up to three hours each day carrying water from its source to their homes. The water they bring home to their families often makes them sick. Women and children are responsible for this daily task, which prevents the kids from getting an education and the women from earning a much needed extra income.“

2. Students should find items in the classroom that weigh up to 40 pounds. Students can either bring in old [1 gallon] milk jugs or stack up books or miscellaneous items.

3. Bring students to a large space to set up a Water Walk. You can use your school’s gym, football field, or, for easier access, a long hallway.

4. Decide the distance students will be walking with the gallons of water and measure it out ahead of time. The distance you have the students walk will depend on how much time and space you have. Keep in mind that their peers typically walk up to three hours a day, so if the Water Walk lasts five minutes, be sure to frame the reality of the walk.

5. Divide the students into groups of three or four, depending on the class size. Inform them that their task is to walk the distance you have measured out and that they must carry the buckets or jugs full of water. Everyone in each group must participate (unless there are health restrictions).

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6. Facilitate a discussion with your students using some of the following discussion questions:
    a. What was our Water Walk meant to simulate?
    b. What words would you use to describe the Water Walk?
    c. Was it easier or more difficult than you expected?
    d. If you were walking to collect water in a country facing a water crisis, what other challenges might you face?

Further Reflection: (for discussion or written response)

Read the story of water walker Helen Apio and answer the following:
www.charitywater.org/projects/stories/i-feel-beautiful-for-the-first-time

1. What issues factored into Helen's decisions about where to collect her water?

2. How does Helen decide where to use her water, and what uses does she prioritize?
    a. Would you make the same decisions?

3. Self-esteem is an important part of our well-being as humans. Having access to clean water has improved and benefited Helen's self-esteem in many ways.
    a. Give three examples of these benefits.
    b. Are these similar or different to issues that you associate with your own self-esteem? Explain.

ABOUT TANZANIA

Population: 47,780,000
47% lack access to water
88% lack access to sanitation
33.4% live below poverty line

Tanzania Case Study

Overview

Tanzania is known for its beautiful parks, expansive lakes, and the soaring Mount Kilimanjaro-- the highest mountain in Africa. Tanzania is the largest country in East Africa and is home to over 46 million people.

Despite recent growth in its economy, Tanzania remains one of the world's poorest countries. Most of the country is too dry and scarce of water to support agriculture. It is one of many nations facing a water crisis. Although water issues affect the majority of the country, the problem is especially severe in northern Tanzania.

In northern Tanzania, water and sanitation systems in schools are either highly overburdened or non-existent. The region's lack of clean water, hygiene, and sanitation at schools is increasingly causing students to miss class or altogether abandon their education. Women and children spend up to four hours per day collecting water from sources likely to make them sick; in fact, roughly 200,000 children die each year after contracting waterborne diseases. And all that time women and children spend collecting water could be spent doing other work, attending school, or caring for families in other ways.

Activity 3: Calculate Personal Water Use

Have students use the below chart to estimate their daily water use.

Directions: Fill out column A with the number of times you do each action in one day. Then, multiply columns A and B to determine the estimated gallons of water you use per day for each activity. Place that answer in column C. Add the subtotals in column C, and write the final total in the box at the bottom right.

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ACTION	NUMBER OF TIMES PER DAY	ESTIMATED AMOUNT OF WATER USED (GALLONS)	TOTAL GALLONS OF WATER USED EACH DAY FOR THIS TASK
Washing face/hands		1	
Taking a shower (standard shower head)		50	
Taking a shower (low flow shower head)		25	
Taking a bath		40	
Brushing teeth (water running)		2	
Brushing teeth (water turned off)		.25	
Flushing the toilet		4	
Shaving		1.5	
Drinking a glass of water		2	
Washing dishes by hand		.25	
Running a dishwasher		3	
Doing a load of laundry		30	
Watering lawn		300	
Washing car		50	
TOTAL	Add up all subtotals from Column C:_____		

I use _____ gallons of water each day.

The average African family uses five gallons of water each day. If you had access to only five gallons of water a day, how would you change the way you use water? Use the information from the above Personal Water Use Chart to determine what a day's worth of water usage would look like if you only had access to five gallons.

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Further Reflection:

Watch Christiana Peppard's video, "Where We Get Our Fresh Water." http://ed.ted.com/lessons/where-we-get-our-fresh-water-christiana-z-peppard

Answer the following based on the video and suggested web resources:

1. There are three sources of fresh water on earth. What are these, and what percentages of fresh water do they each account for?

2. What sources of fresh water is charity: water, and soon- the Students Rebuild Water Challenge, helping communities in Tanzania access?
    a. Visit www.charitywater.org/projects/completed-projects and locate Tanzania on the interactive map to find examples.

3. Select one of the water methods being used by charity: water in Tanzania for further investigation. How does this system work, and what source of fresh water does it specifically use? Does this water need to be filtered? Why or why not? Use the internet for assistance.

4. What percentage of over-all global water use does 'personal' water use actually account for?

5. According to Peppard's video, what uses the most fresh water globally, and why? Is this surprising? Please explain.

6. Based on your response to question five, what practices and innovations in this sector are necessary to reduce water use and preserve fresh water sources?

Activity 4: Webcasts (Optional)

Webcasts are special events live-streamed through the Internet from Tanzania. During the webcasts associated with the Students Rebuild Water Challenge, students will learn about the challenge, charity: water, and the global water crisis. Through a live-stream video and live chat function, youth participants will gain a better understanding of Tanzania's water issues and learn about the country's culture with guest experts from Concern Worldwide Tanzania and their Tanzanian peers. Three

webcasts will take place between January 2014 and October 2014 to highlight different stages of the Students Rebuild Water Challenge. Tentative schedules and information is below.

PREPARING FOR THE PROGRAM

If this is your first time viewing a Google Hangout On Air program, please review this FAQ for Connected Classrooms educators. As far as technology, be sure you have the following:

- Google+ account
- Reliable high-speed internet connection
- Projection system to display the Hangout On Air for students
- Webcam & Microphone

TENTATIVE EVENTS

- **Webcast 1 (winter 2014):** Introduction to the challenge: What is the Global Water Crisis and what can I do to help?

- **Webcast 2 (spring 2014):** Case Study- Tanzania: How are communities in Tanzania affected by the water crisis and what are they doing to respond?

- **Webcast 3 (fall 2014):** The outcomes of the SR challenge: The Bead Effect—How your beads funded 41 water projects in Tanzania

TENTATIVE PROGRAM OUTLINE

- **Segment 1: Introduction (5-7 minutes)**
  GNG will introduce the topic and the participants. Feel free to introduce your school in the Q&A box with the following information: Name of School, State/Province, Country

- **Segment 2: Global Water Crisis (20 minutes)**
  Staff from Concern Worldwide Tanzania and charity: water will explain the science and politics behind the current global water crisis. Tanzanian youth from areas impacted by charity: water projects will share their experiences dealing with this crisis.

- **Segment 3: Students Rebuild Water Challenge (20 minutes)**
  Learn how you can make a difference by taking part in the Students Rebuild Water Challenge and how you can help bring clean, safe drinking water to the people who need it most.

- **Segment 4: Conclusion (5 minutes)**
  A brief conclusion to the program.

ACT

The water crisis is extensive, but we can face it together. And you can be part of the solution. The Students Rebuild Water Challenge, in partnership with charity: water and Global Nomads Group, will help bring clean, safe drinking water to those who most need it.

Here's how: make a paper bead and mail it in to generate funding for water projects in Tanzania. Every 20 handmade beads will provide access to clean water for one person in a village. This school year, your handmade beads can provide clean water to over 16,000 Tanzanians because the Bezos Family Foundation, through Students Rebuild, will match your beads with funding for 41 water projects that serve schools and communities.

This will mean more than clean water— it will mean opportunity. Access to clean water not only allows people the freedom to go to school and get an education, but it also means less disease and more money for books and other needs.

Water affects everything: education, health, economic prosperity, and prospects for both women and children. It also affects you— even if you're not yet feeling the effects of the water crisis in your own backyard.

Take the Challenge now to help communities and schools in Tanzania get clean water and healthier communities! Take action. See change.

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Watch this video to learn more: http://youtube/BBlzb2tMGdg

Download the STUDENT TOOLKIT and start making beads!

REFLECT

Read the following quotes and select one to reflect upon.

> "Alone we can do so little, but together we can do so much." – *Helen Keller*

> "When we make something with our hands, it changes the way we feel, which changes the way we think, which changes the way we act." – *Carl Wilkens*

How do these quotes relate to your experience participating in the Students Rebuild Water Challenge? You may write, discuss, draw, perform, or suggest another medium to express this relationship. Please be detailed, diligent and thoughtful in your responses.

Continue your conversation and share what you've done! Students Rebuild offers unique opportunities to directly connect with humanitarian staff, other Water Challenge participants, and young people in Tanzania through blogs, interactive programming, live webcasts, photo sharing, video, and more.

Share Your Voice

Take a picture of the bead(s) you created and share a message about why it's important to you to engage with this issue and take a stand against the water crisis. Students Rebuild has several social media channels you can use to share your message, including Facebook, Instagram, Google+, YouTube, Twitter, Pinterest, and Tumblr.

Why Beads?

Beads are a part of life in Africa- they're often used for ceremonies, given and exchanged at significant life events such as birth, puberty, marriage and death. For thousands of years, African beads have been used as adornment, communication and currency. To honor the people of Tanzania, we invite you to join a global bead-making effort that brings schools and communities clean, safe water.

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