Clear the Way

Adult help needed.

In developing countries like the Dominican Republic and Haiti, many kids drink dirty water because it’s all they have. The dirty water can make them sick. Compassion provides water filters to families who need them in their homes. Make your own mini water filter and see how the beginning of the process works!

Supplies
- dirty water
- plastic water bottle or 2-liter soda bottle
- scissors
- 2 coffee filters
- sand
- gravel/pebbles
- rocks

Directions
1. Fill a cup ¾ full with water. Make it dirty by adding some dirt or sand, and then set it aside.
2. Have an adult use scissors to cut the plastic bottle in half and poke a hole in the lid.
3. Turn over the top part of the bottle so the lid is facing down, and place it in the bottom portion of the bottle.
4. Put the coffee filters inside the top part of the bottle and push them down.
5. Pour some sand onto the coffee filter. Then place some pebbles on top of the sand layer. Next place some bigger rocks over the pebbles.
6. Slowly pour your glass of dirty water into the bottle over the rocks. What do you notice about the water that drips into the bottom part of the bottle?

WHAT HAPPENED?
Your filtration system turned the dirt in your water into clumps that got stuck along the way, while the liquid was able to pass through. Your filter is a simpler version of the ones Compassion provides, so it doesn’t include the final disinfection step. That means that even though your filtered water looks clearer, it might contain bacteria. To make it safe to drink, it would need to be boiled for 5 minutes. Many kids living in poverty who don’t have filters boil their water each time they need to cook, brush their teeth or take a drink!