

**FLATHEAD LAKE  
BIO STATION**  
UNIVERSITY OF MONTANA

# Make Your Own Filter

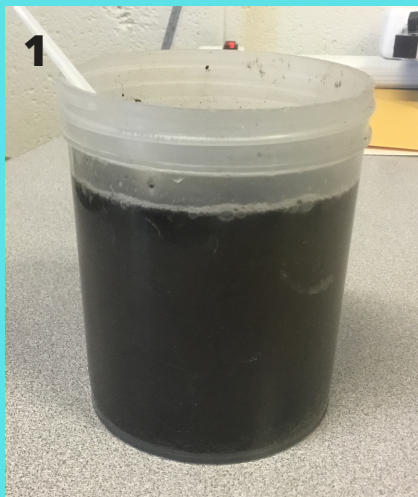
**Do NOT drink any of the water used in  
this activity.**

## Materials

- 4 plastic cups
- 3 clean plastic bottles (16.9 fl oz)
- Scissors
- 3 rubber bands
- Cheese cloth
- Gravel and sand, rinsed and cleaned
- Dirt
- Water

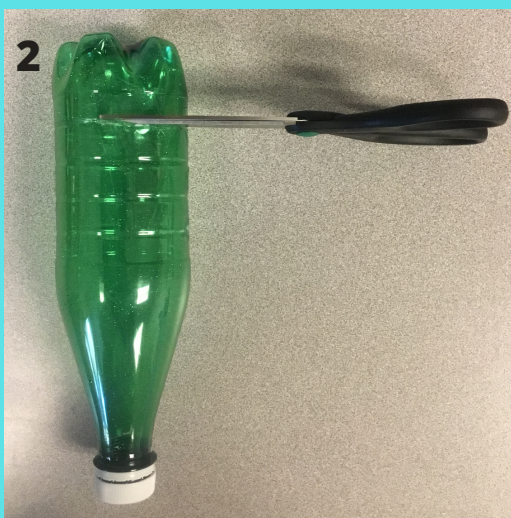
# INSTRUCTIONS

1



**Make a cup of dirty water using dirt from outside.**

2



**Carefully cut the bottom third of each water bottle off (ask an adult for help).**

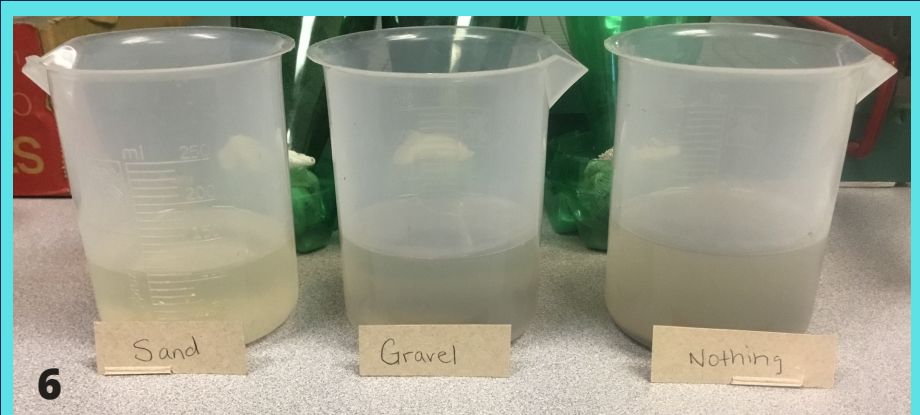


**With a rubber band, secure a piece of cut cheese cloth around the opening of the water bottles. Make sure the cheese cloth has two layers to be strong enough to hold gravel and sand.**



**Add  $\frac{3}{4}$  cup of sand to one bottle,  $\frac{3}{4}$  cup of gravel to another, and leave the third water bottle empty.**

**Place all 3 water bottles upside-down into the plastic cups. Pour equal amounts of dirty water into the water bottles.**



**Once your water passes through the filter, label each cup. Place the filtered water in order from clearest to dirtiest water. Which filter worked the best?**