

# Make Your Own Water Filter

The study of bodies of fresh water is called limnology. Limnologists want to learn about the biology, chemistry, and geology of lakes, rivers, ponds, wetlands and other bodies of freshwater.

Freshwater is more than just H<sub>2</sub>O, it also contains nutrients, organic compounds, and microorganisms, including bacteria, diatoms and more!

**Learn more about freshwater near you by taking a water sample and filtering it!**

Note that water filtered in this experiment is not safe to drink.

You will need:

- A funnel
- An empty bottle or other container
- Coffee filters, paper towels
- Soil, sand, sticks
- Stones



1

## Sample Water

Visit a local body of fresh water. If there's no lake, river, stream, wetland, or pond nearby, mix some tap water with some soil to create your own.



2

## Set Up Your Filter

Place the funnel at the top of the bottle and place your filtering materials inside (soil, sand, sticks, rocks, etc).



3

## Test Your Filter

Pour the water through your filter and see what the filter collects! What ends up in the bottle?



4

## Try New Combinations

Try creating different versions of filters using the materials you have to see which combination works best.

