



*Think About It: Where can you find water? Can you drink the water from all of these places? What are some sources of water pollution?*

*We have clean water because our water has been treated at sanitation facilities and water treatment plants. They make sure that the water has the perfect pH (not too acidic or basic). These places use filters to clean the water. Today, you'll be creating your own filtration device.*

### **Materials (per person)**

Water

2 medium disposable cups

1 tbsp dirt (simulate pollution)

1 tbsp cooking oil (simulate pollution)

1 tbsp glitter (simulate pollution)

1 pen

Filtration Materials: paper towels, cheesecloth, gravel, sand, cotton balls, charcoal, and coffee filters

### **Procedure**

1. Create your polluted water.
2. Begin making a filtration device by pushing the tip of a pen through the bottom of one of the small cups to create a small hole.
3. Next, layer the filtration materials in the order you think would best filter out the water.
4. Put your filtration device cup into the other cup and pour the polluted water through it.
5. Is your water clean?
6. Try multiple combinations! Let the volunteers know if you need help brainstorming ideas.

Sources: <https://www.acs.org/content/dam/acsorg/education/resources/k-8/science-activities/planetearth/water/cleaning-water-with-dirt.pdf>  
[http://www.earthday.org/sites/default/files/Filtering%20Water%205-8\\_Lesson%20Plan.pdf](http://www.earthday.org/sites/default/files/Filtering%20Water%205-8_Lesson%20Plan.pdf)  
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