

Water Filter

Environment & Outdoors



DISCOVER



MEETING



14 LIFE
BELOW WATER



6 CLEAN WATER
AND SANITATION

What You Will Discover

Explore the process of water filtration.

The Adventure

How do water filters work? Try this experiment and build a water filter out of simple materials to get rid of big and small things that float in the water. Use an old re-usable paint tray, and create a model to learn how a real water filter works. You can even try creating a small simulation to test natural water filtration with a model coastal shoreline. Watch your water become cleaner as it moves through your filter.



It starts with Scouts.

Plan

- Where will you share this adventure?
- What does a water filter do? Why would you need to use a water filter?
- What materials could you use to build a water filter?

Do

#ScoutsDoStuff: Share what you've done with a younger Section, your community, or with your friends and family!

Review

- How did you make your filter? Why did you use that design?
- Do you think your homemade filter would work? Why shouldn't you drink the water from your homemade water filter?
- What did you like about this adventure? How would you do this adventure differently?

Safety Note

This filter will not clean very small living creatures—called microbes—from the water, and you should not drink water from this water filter. What is different about real water filters that allows you to drink the water from them?

Try this

Keep it Simple

Make a water filter using the end of a plastic water bottle and natural resources that you find outside! How effective is your water filter? What does it clean out? What do you think it misses? Why not also take a look at water flow in general? Try making your own dam to see how larger amounts of water flow and changes in levels.

Take it Further

This water filter experiment only takes larger objects (that we can see with our eyes) out of the water. What will it take to make the water drinkable? How can you test it? What are some smaller objects in the water that could be dangerous to humans? Could you use technology to help you, such as a microbit? Take it further by learning about watersheds and nature's natural water flow system that makes up much of our rivers and more! How does this water compare in cleanliness to your filter?

