

# Microplastics Science Experiment - Instructions

In this experiment students will be testing whether they can identify microplastics in the water they drink. Try to collect a range of water from different sources, such as from the taps at school, from taps at home, bottled water and filtered water. If you also have access to sea water or water from a local creek or river you could also use these.

TIP: Microplastics can come from synthetic fabrics, including polar fleece. Because you are looking for microplastics, it is recommended you wear clothing made of cotton, such as cotton t-shirts or lab coats.

Equipment needed:

- Vacuum filter set (see right)
- Filtered water
- Filter paper
- Petri dishes (one for each type of water you're testing)
- Tweezers
- Paper and pen
- Microscope
- Different types of water - try to collect a range of water from different sources, making sure you have the same amount of each sample.

Procedure: For each type of water you are testing, follow these steps -

1. Clean the funnel with filtered water.
2. Ensure your filter paper is carefully placed in the funnel and ensure your funnel is connected to the beaker/flask.
3. Pour the water you are testing into the funnel. Use the vacuum to help pull the water through the filter paper. TIP: You could partially cover the top opening of the funnel with a lid - such as a petri dish lid - to improve the suction; however, make sure the opening isn't completely covered as this will create a seal and the water won't be drawn through the paper.
4. Keep an eye on the water being drawn into the beaker/flask and make sure it never goes high enough to enter the vacuum tube. You may need to tip some of the water from the beaker away.
5. Once you have passed all the water from your sample through the filter paper, carefully remove the filter and place it in a petri dish. Add a label to identify the water your sample comes from, and place a lid on the petri dish.

