

# Mini wetlands experiment

## Introduction

This sheet has been created using screen shots from the video 'How to Build a Wetlands Water Filter' from the Youth Wetlands Program. The full video can be viewed [here](#).

## What you will need

- ✓ 2 litre clear water bottle with lid.
- ✓ permanent marker pen.
- ✓ pair of scissors.
- ✓ coffee filter
- ✓ a lidded container holding water mixed with mud e.g. a jam jar.
- ✓ tape to make the edges less sharp (optional)
- ✓ materials to fill your filter e.g. fresh grass, dead and fresh leaves, gravel, sand, small stones, clay, silt. Make sure you have a mixture of these.

## Instructions

1. Draw a line about  $\frac{1}{4}$  of the way down from the top of the 2-litre bottle using the permanent marker pen.
2. Cut along the line using a pair of scissors. (Optional) wrap tape around the edges to make them less sharp.
3. Making sure that the lid is still on the bottle top, place the coffee filter inside.
4. Then put the bottle top inside the bottom to help keep it stable while you fill the top up with the materials you have collected.
5. Layer the materials in the top half of the bottle. Start with a mixture of soil/sand and gravel then add any dead leaves / twigs and finally the leaves at the top. Push the layers into the top but not too hard.

It's now time to test you model.

6. Start with removing the cap / lid of the water bottle so that liquid can flow through it. Make sure you put the bottle top back in the bottom.
7. Take the container with muddy water and shake if it needs mixing up.
8. Slowly pour SOME of the muddy water into the top of your model. It will take some time to soak in especially if the mud/sand was dry when you put it in. Keep the rest so you can compare it once the water has filtered through.
9. Compare the water which has collected in the bottom to the muddy water jar.

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