Microscopic Creatures in Water

Science Film Festival — Knowledge Through Entertainment

Science Film Festival Film

Experiment Children's Science

Introduction

Water can be home to a lot of interesting creatures and microorganisms, especially if it's dirty water found in ponds or near plants. Take some samples, view them under a microscope and see what you can find. Experiment and see what kind of microscopic creatures you can find!

Key Objectives

- To understand that there can be many different microorganisms in water.
- To understand the importance of sanitizing drinking water.

Materials

- A concave slide
- A dropper
- A microscope
- Different samples of water (tap water, pond water, muddy water etc). Near plants or in the mud are good places to take samples as they usually contain more microorganisms.

Safety Instructions

Take care when collecting the water samples.

Guiding Questions

1. How clean is the water from your tap compared to the water found in a pond?
2. How many different microorganisms can you find?

Beginner

Resource Type
Experiment

Topics
Microorganisms, Water Life

Subjects
Biology

Keywords
Euglenas, Protozoa, Amoebas, Algae

Time For Activity
20 – 30 minutes

Tasks/Steps

1. Set up you microscope, preferably using its highest setting.
2. Use the dropper to take some water from one of your samples and put it on the concave slide. Focus the microscope, what can you see? Be patient if you can't see anything. If you still can't see anything and have checked that you are in focus, try a different water sample.
3. Look at how the creatures move. After observing their movements you might like to record their behaviors and draw them.

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Some of the creatures and microorganisms you might be able to see include:

Euglenas

These are between a plant and an animal, they have a long tail called a flagellum which allows them to move.

Protozoa

They have a flagella (tail) which can be hard to see, the difference between protozoa and algae is often hard to define.

Amoebas

These microorganisms swim by wobbling. They also surround their food like a blob in order to eat it.

Algae

Not considered to be plants by most scientists, these organisms might be colored yellowish, greenish or reddish. They may also be found by themselves or in chains.

There might even may larger creatures such as worms or brine shrimp in your water samples, depending on where you took them from.

Authors/Source

http://www.sciencekids.co.nz/experiments/microscopiccreatures.html