

Microscopic Pond Organisms

Lesson Author: Amy Hosier

School or Agency: St. Anne Wetland Education Outreach Project

Grade Level(s): 6-12

Science Topic: single-cell organisms, microscope

Summary

Discuss the different types of microscopic organisms found in lakes, ponds, creeks, etc. and how they move, eat, avoid predation, etc.

Core Content

NS.K-4.1: Science as Inquiry

NS.K-4.3: Life Science

Objectives

- 1) Students will be able to identify microscopic organisms that live in ponds
- 2) To understand the roles they play in the ecosystem.

Materials

- collection jars
- plastic trays
- gloves
- hand lenses

Procedures

- 1) Show the children the equipment that they are going to take out with them and how they use each item. It is important that they don't lose the organisms after they have caught them.
- 2) Go to the wetland pond and allow the children to collect samples of water and soil from the bottom of the wetland pond. Used tubes for collections.
- 3) Bring the samples back to the classroom and look closely at them using microscopes or magnifying glasses. Use a simple classification keys to recognize the features and identify them.

Assessment Techniques

Vocabulary: cilia, flagellum, pseudopodia, organelles, asexual reproduction

Extensions

- Have students think about the different adaptations that these organisms use to survive, using pictures have them list different characteristics that they notice.
- Using post it notes, play what am I? (each child has a post-it-note on their head and asks a question to try and work out what organism they are based on the organisms they found.)
- Have students imagine themselves as a pond organism and describe a day in the life of..... (They can write a story or poem about what they can see, hear, how they get food etc.

Resources

Pond Life Identification Key. [http://www.microscopy-uk.org.uk/index.html?](http://www.microscopy-uk.org.uk/index.html?http://www.microscopy-uk.org.uk/pond/index.html)
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