Beach Exploration Rotations

Lesson 11: Microscopy

Subject

Plankton

Objectives

The students will:

- Observe phytoplankton and zooplankton under a microscope
- Learn about the role of phytoplankton in the food chain.

Materials

- Microscope with computer
- Microscopes
- Phytoplankton sample
- Prepared slides

Size/setting/duration

One third of class/Birch Bay State Park BP Heron Center/15 minutes

Background

Phytoplankton are essential to life in the ocean since they act as the base of the food chain. Students get an introduction to these microscopic organisms which are food the shellfish they have learned about.

Procedure

- Show students plankton under the microscope. Plankton are small organisms that drift with the ocean current. Phytoplankton are the base of the food chain. Just like plants on land, phytoplankton are green because they make their own energy from the sun.
- Students can also observe other microscopic organisms
- Students will draw an organism that is under the microscope.

Next Generation Science Standards

Performance Expectations		
5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment		
Scientific and Engineering Practices	**Disciplinary Core Ideas**	**Cross-cutting Concepts**
Developing and using models Science models, laws, mechanisms, and theories explain natural phenomena	LS2.A: Interdependent relationships in ecosystems LS2.B: Cycles of Matter and Energy Transfer in Ecosystems	Systems and System Models

Graphics

None

Worksheet

Microscopy

Look through the microscope and at the pictures of microscopic organisms at your station.

What do you see? _____

Connection: What microscopic organisms might an oyster eat? _____

In the circles below draw the organisms you observe under the microscopes.