

Seashore Unit for First Grade

Goals:

- *To identify the differences between animals and plants. (Animals must acquire food. Plants manufacture their own food.)
- *To introduce students to new animals and plants found in the local intertidal zone.
- *To identify different parts these animals use to survive, grow, and meet their needs.
- *To introduce students to common environmental issues that affect the health of our local intertidal zone. (eg. plastic on beaches, pollution in water, removing creatures from their habitat, removing habitat features such as shells and rocks from the area.)

Next Generation Science Standards addressed:

1-LS1-1: Use Materials to design a solution to a human problem by mimicking how plants and/or animals use the external parts to help them survive, grow, and meet their needs.

Disciplinary Core Ideas/ Crosscutting Concepts addressed:

K-2 LS1.A: Structure and Function

All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

Related Ideas in *Benchmarks for Science Literacy (AAAS 2009)*:

K-2 Diversity of Life:

Some animals and plants are alike in the way they look and in the things they do. Others are very different from one another.

K-2 Cells:

Magnifiers help people see things they could not see without them.

Assessment opportunities:

Formative Assessment Probes from *Uncovering Student Ideas in Primary Science* by Page Keeley NSTA Press 2013

“Is it an Animal?” and “Is It Made of Parts?”

Lesson Sequence:

- 1) Administer Probes: "Is it an Animal?" and "Is It Made of Parts?"
Use information to uncover student ideas.
- 2) Expose children to pictures and models of common animals and plants that are seen at our local intertidal zone.
- 3) Teach about the various animals found in the intertidal zone.
Use current "First Grade Seashore Week" materials.
- 4) Watch "Sunflower Sea Star" YouTube video found on Garden of the Salish Sea website. This illustrates how animals use their parts to eat and protect themselves. Other good videos to use from their website include: "Intertidal Biome" and "Remarkable Lives of Limpets".
- 5) Use magnifiers and pictures to see various parts of intertidal zone animals, discuss how they obtain food and how they protect themselves.
- 6) Teach about environmental hazards that children can help while at the beach. (eg. plastic on beaches, pollution in water, removing creatures from their habitat, removing habitat features such as shells and rocks from the area.)
- 7) Use Salish Sea curriculum for in class lessons on Clam Identification.
- 8) Participate in a field trip to Birch Bay State Park to see the intertidal zone. Meet with the Park Naturalist on the beach and Salish Sea Staff in the Heron Center for class lessons.
- 9) Use science journals to record what was observed at the Park. Use science journals to write about the intertidal zone habitat and how it was maintained by students while at the Park.
- 10) Administer Probes: "Is it an Animal?" and "Is It Made of Parts?"
Determine student learning based on new information obtained from assessment.