



SCIENTIST IN RESIDENCE PROGRAM™

Science Unit: Exploring Biodiversity

Lesson #4: Intertidal Food Web

Lesson Summary:

Students will each “become” a species and build a food web to understand how species are animals are interconnected. In preparation for our upcoming field trip to the intertidal, we will go over some of the species we are likely to encounter.

Grade level: Presented to grade K-2; appropriate for grades K –4 with age appropriate modifications

Duration of lesson: 30 minutes

School Year: 2015/2016

Developed for: Collingwood Neighborhood School, Vancouver School District

Developed by: Carla Crossman (scientist); Mily Phan and Nadine Kinna (teachers)

Learning Objectives

1. Understand how species in the intertidal interact by creating a food web.
2. Review some of the species we might see at the beach.

Materials

Worksheets, labels, yarn

Background Information

As we prepare for our field trip to the intertidal, students will review of some species they may encounter. Students will start to think of how these species are interconnected by constructing a food web. This food web will look different every time and depend on the number of students participating. It will be a fun way for students to get a little tangled as they build the web. This is a precursor to some of the species will we see on our trip, so be sure to select species they are likely to encounter.

Vocabulary

Word	Brief definition
Lifecycle	The series of changes an organism goes through during its life.
Cyst	The dormant state of desiccated brine shrimp eggs.
Larvae	A young, immature life stage of many invertebrates.
Food Web	The interconnected relationships between predators and prey. It depicts how all species are dependent on each other in an ecosystem.
Predator	An animal higher on the food chain that feeds upon other animals.
Prey	An animal lower on the food chain that is eaten by other animals.
Intertidal	The area of shoreline that is covered at high tide, but exposed when the tide is out.



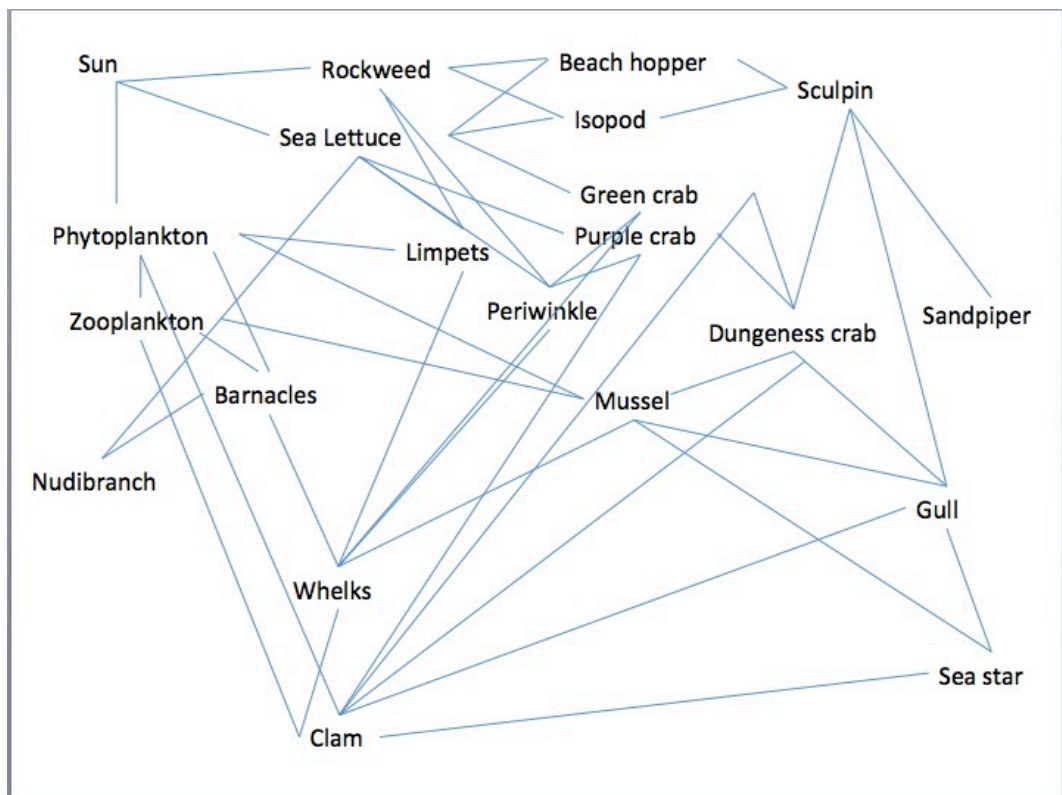
Lesson Detail

Activity: Food Web Game

Purpose of Activity: To introduce species that live in the intertidal and understand how they are connected in the food web.

Methods and Instructions:

1. Show students a picture of the beach and have them brainstorm different species we may find in the "intertidal zone".
2. As students come up with different species, write them down on a label/name tag and give one to each student.
3. Once all students have a label, start by making connections between predators and prey with pieces of yarn (i.e., sea gulls eat crabs and therefore the student with a seagull name tag and the student with a crab name tag each hold one end of a piece of yarn to connect them). As more and more students are incorporated, the food web will become increasingly complex.



Closure Discussion

1. Who has been to the beach in Metro Vancouver before?
2. What are you looking forward to seeing at the beach?
3. How can we stay safe at the beach?

