Garden of the Salish Sea Curriculum
Day 3: Shell Identification and Inquiries
Wade King Elementary
Third Grade

Students
Families
Communities
Environment

www.restorationfund.org/salishseacurriculum

NAME:_____

Small Clam Identification Key

Learning how to identify plants and animals using a key is an important skill to be able to quickly and accurately make identifications in the field. Today, we will practice sorting clams with similar characteristics. Below is an example key to help identify some of the clams we will find on the field trip.

To get started with the key: Can you see a leathery hinge connecting the shells?

If no...

1. Shells are not mirror images, no flaps are present on the tips of siphons. **It is a Softshell Clam.**

2. Shells are mirror images of each other, flaps are present on the tips of siphons. **It is a Horse Clam.**

If yes...

1. And rings or ribs are easily seen on the shells...

Shell has heavy ribs and shell is heart-shaped. **It is a Cockle.**

Rings and ribs are equally visible. Shell is elongated, there is a flat pit near the umbo. **It is a Manila Clam.**

Shell is rounded and there is no pit near the umbo. **It is a Littleneck Clam.**

2. If faint rings or ribs are seen on the shells...

Shells are rounded on both ends, no periostracum. **It is a Butter Clam.**

Shells are pointed somewhat on one end, band of periostracum is seen along shell edges. **It is a Sand Clam.**

Clam Shell Sort:

Sort out the shells given to your group. Divide them up by common characteristics. In the space below, for each clam, record the name, length, width, weight, and write a brief description with a diagram of the clam. Be sure to point out any identifying features in the diagram.

Name of Clam	Size-length and width	Weight	Description- color, shape and markings	Diagram of shell
	Length: _____ (unit) **Width:** _____ (unit)	 _____ (unit)		
	Length: _____ (unit) **Width:** _____ (unit)	 _____ (unit)		
	Length: _____ (unit) **Width:** _____ (unit)	 _____ (unit)		
	Length: _____ (unit) **Width:** _____ (unit)	 _____ (unit)		

Clam Shell Sort Continued:

Name of Clam	Size-length and width	Weight	Description- color, shape and markings	Diagram of shell
	Length: _____ (unit) **Width:** _____ (unit)	_____ (unit)		
	Length: _____ (unit) **Width:** _____ (unit)	_____ (unit)		
	Length: _____ (unit) **Width:** _____ (unit)	_____ (unit)		
	Length: _____ (unit) **Width:** _____ (unit)	_____ (unit)		

Clam Shell Data Sheet

Below is an example of the data sheet that will be used for the clam survey field trip.

Whatcom Marine Resource Committee Clam Survey Data Sheet - Mud Bay -

You are collecting data that will help your community track the health of the tidelands. Treat the area with respect, replace rocks where you found them and please don't litter.

Lable each row by the hole # (it may not start with 1) Before digging, count the Horse Clam holes, after you have dug out your hole, classify the clams by species (type) then by size (larger or smaller than 1.5 inches). Fill in on the data sheet the number of each clam:

Transect #						
Sample Hole #						
Sub						
Veg						
Water						
Horse						

	Varnish		Manilla		Native Littleneck		Macoma		Cockle		Butter		Eastern Softshell	
	<1.5 in.	>1.5 in.	<1.5 in.	>1.5 in.	<1.5 in.	>1.5 in.	<1.5 in.	>1.5 in.	<1.5 in.	>1.5 in.	<1.5 in.	>1.5 in.	<1.5 in.	>1.5 in.
Total														

< less than or smaller
> greater than or larger

Sub = subtrate, S(sand) G(gravel) C(cobble) B(bedrock)

Vegetation - P,present, A,absent

Water - deeper than 1 inch Y/N

Grand total

1. Which type of clam is the most plentiful or abundant?

2. Which type of clam is the least plentiful or abundant?

3. What was the total number of clams that your group counted?

Using your number sense, make a pie graph by dividing the circle into pieces that represent the amount of the different types of clams that your group found. Work together with your group.
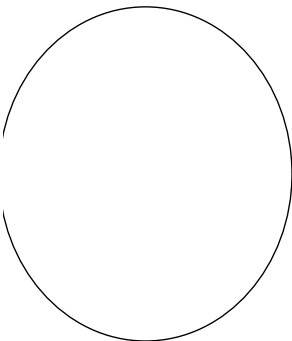
Clam Shell Size Data Sheet:

Below is an example of the data sheet that will be used in the field to collect data on the size of clams.

Clam Shell Size Data Collection Sheet North Chuckanut Bay

Date: _____   Field Technician Names:_____

Transect and Hole #	Shell Type	Shell Size	Notes