Name _____ Date: _____ Core:_____

Seashell Observation Lab

Directions: Read the information below about shells. Then choose 3 shells from your bag and make qualitative and quantitative observations. Fill in the data table for each shell. Then answer the questions.

A seashell is a hard protective outer layer created by a mollusk that lives in the sea. The shell is part of the body of the animal. Empty seashells are often found washed up on beaches by beachcombers. The shells are empty because the animal has died and the soft parts have been eaten by another animal or have decayed. The animal can also occasionally lose its shell due to physical damage to the shell itself, and they can't ever go back into its shell once detached.

Everyone can find ways to classify sea shells based on all their different shapes and features. Scientists and other people have been looking at or observing shells for a long time. They figured out ways to classify shells by observing their structures, shapes, patterns, and textures.

When scientists classify shells, they first put them into one of these basic categories: the univalves, or gastropods, with one shell (like a snail); and bivalves, which have a two-part shell (like a clam). Gastropods are animals in the Class Gastropoda - the group of organisms that includes snails, slugs, limpets and sea hares. There are over 40,000 species in this class. Envision a sea shell, and you're probably thinking about a gastropod.

Bivalves are a group of mollusks that include clams, scallops, oysters, mussels, razor shells, cockles, venus shells, borers, trough shells and many others (some of which have yet to be identified). In total, there are about 9,200 living species of bivalves making them the second most diverse group of mollusks, ranking behind only the gastropods in species numbers.

Bivalves are so named for their paired shells. The shells of a bivalve are made up of two halves that are mirror images of each other and are joined at one edge by a flexible hinge.

Some of the shells you find may have holes in them. These holes were likely caused by an attack by a predator looking for a meal. Other features you saw on your shells include ridges. The ridges on clam shells tell us how old they are.

Shell #1

Colors	Textures	Patterns	Shapes	Size
___ White	___ hard	___ stripped	___ round	Measure the length and width of your shell at the longest and widest part. Measure using cm.
___ Pink	___ rough	___ dotted	___ oval	___ length ___ width
___ Orange	___ smooth	___ checkered	___ pointy	Illustrate:
___ Brown	___ knobby	___ ziz-zag	___ spiral	
___ List other	___ List Other	___ List Other	___ List Other	

Shell #2

Colors	Textures	Patterns	Shapes	Size
___ White	___ hard	___ stripped	___ round	Measure the length and width of your shell at the longest and widest part. Measure using cm. ___ length ___ width
___ Pink	___ rough	___ dotted	___ oval	
___ Orange	___ smooth	___ checkered	___ pointy	Illustrate:
___ Brown	___ knobby	___ zig-zag	___ spiral	
___ List other	___ List Other	___ List Other	___ List Other	

Shell # 3

Colors	Textures	Patterns	Shapes	Size
___ White	___ hard	___ stripped	___ round	Measure the length and width of your shell at the longest and widest part. Measure using cm. ___ length ___ width
___ Pink	___ rough	___ dotted	___ oval	
___ Orange	___ smooth	___ checkered	___ pointy	Illustrate:
___ Brown	___ knobby	___ zig-zag	___ spiral	
___ List other	___ List Other	___ List Other	___ List Other	

Questions

1. What are the two basic categories of mollusk shells?

2. What are some characteristics scientists look for to help them classify shells?

3. What is one reason some shells develop certain features over time?

4. Why do some shells have holes in them?

5. How many gastropod shells do you have in your bag? _____How many bivalve shells? _____
6. Choose one of your shells and make an inference? Support your inference with an explanation.