Mollusk Lab

Name: _____

This lab is to help familiarize you further with 5 of the 7 classes of Mollusca – Bivalvia, Gastropoda, Cephalopoda, Scaphopoda, and Polyplacophora. You will need your NOTES to help you identify the classes.

- **DO NOT THROW, SHAKE, OR MISHANDLE ANY SPECIMENS. Many of these specimens are very fragile.**
- **THEY WILL BREAK if you try to break them – SO DON'T!!!**

Station 1: Examine the Abalone shell. Sketch it below.

Class _____

1. What is the purpose of the holes in the shell? _____
2. The abalone's diet consists of algae and seaweed. But HOW do they feed?
   _____
3. Why are some abalone populations declining so much? _____

Station 2: Examine the information provided about scaphopods. Sketch below.

Class _____

4. What is the common name for the scaphopods? _____
5. Water is drawn in through the small tip of the shell and flows into the mantle cavity. What is the purpose of this action? _____
6. Scaphopods have many skinny thread-like tentacles called _____.
7. What are the structures described in #6 used for?
   _____

Station 3: Examine the preserved scallop specimen. Sketch it below.

Class _____

8. Because they have larger and more developed adductor muscles than oysters, scallops are active swimmers and the only _____ bivalve.
9. Scallops have eyes, but what exactly can they see with their eyes? _____
10. What is one way the scallop can defend itself from predators? _____

Station 4: Examine the models of the Chambered Nautilus. **Sketch BOTH INSIDE and OUTSIDE of shell below.**

Class _____

Sketch BOTH INSIDE and OUTSIDE of shell.

11. What makes the nautilus different from all other cephalopods? _____
12. A newly hatched nautilus starts with about _____ chambers and has about _____ chambers by adulthood.
13. How does the nautilus dive? _____

Station 5: Examine the preserved specimen of a Chiton. Sketch it below.

Class _____

14. About how many living species are in this class? _____
15. What would these animals do if you managed to pry them off a rock? _____
16. Explain their "homing behavior". _____

Station 6: Examine the preserved specimen of a squid. Sketch it below.

Class _____

17. The squid has 8 arms with suckers, and 2 longer tentacles with hook-like structures. What are the tentacles used for? _____
18. What is a spermatophore? _____
19. How big can the giant squid get? _____

Station 7: Examine the shell specimens. Determine which specimen is the Lightning Whelk. Have both shells in front of you with the opening facing toward you. The Lightning Whelk is a "left handed" shell (it's opening is on the left side), whereas most other univalve shells are "right handed" (opening is on the right side). Sketch the Lightning Whelk.

Class _____

20. Where is the Lightning Whelk only found? _____
21. How is the Lightning Whelk physically different from most other univalve shells?

    _____
22. What were the egg casings used for in the past? _____