Clam Dissection Guideline

Name :_____ 1 2 3 4

Tray #_____

1. Locate the **umbo,** the bump at the anterior/top end of the valve/shell. This is the oldest part of the clam shell.
2. Measure the Length of the Clam _____cm

3. Measure the Width of the Clam _____cm

4. Open the clam at the popsicle stick that is already in your clam

5. Locate the **adductor muscles**. Slide your scissor between the upper valve/shell & the top tissue layer. Cut down through both posterior/top and anterior/bottom **adductor muscles**, cutting as close to the shell as possible.

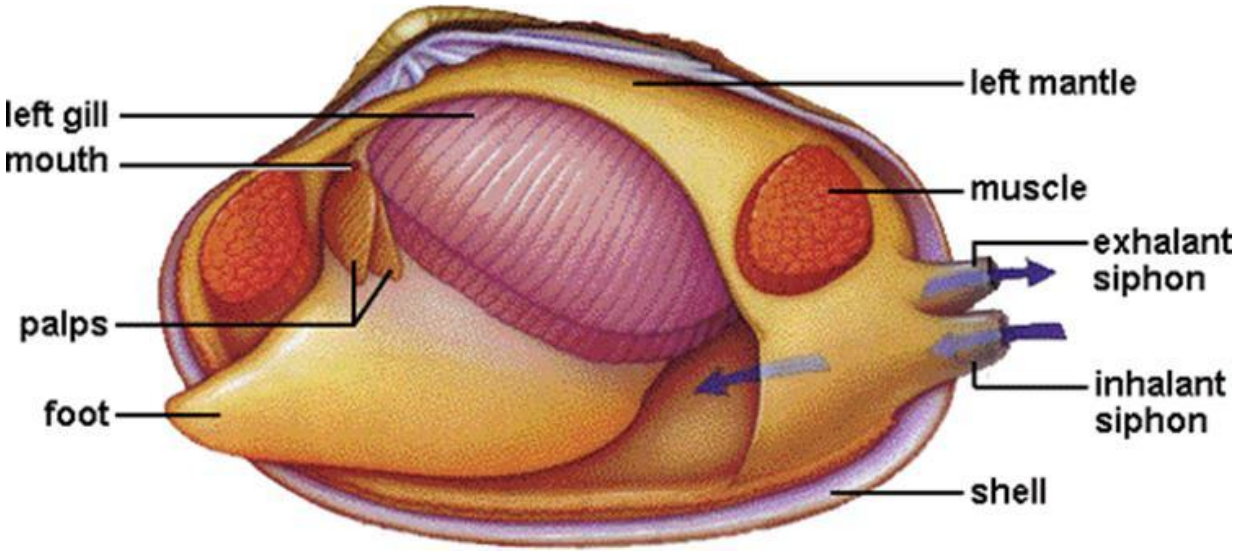
6. Bend the left valve/shell back so it lies flat in the tray.

7. Run your fingers along the outside and the inside of the left valve and compare the texture of the two surfaces.

8. Examine both valves near the umbo and locate the toothlike projections. Close the valves & notice how the toothlike projections interlock to create a hinge. Open the clam so it lies flat.

9. Locate the muscle "scars" on the inner surface of the left valve. The adductor muscles were attached here to hold the clam closed.

10. Identify the **mantle**, the tissue that lines both valves & covers the soft body of the clam. Find the **mantle cavity**, the space inside the mantle.



11. **Gently use you probe to move gills around and look for two white tubes toward the posterior. Refer to the picture above for labels.**

12. Observe the **muscular foot** of the clam, which is ventral/bottom to the gills. Note the hatchet shape of the foot used to burrow into mud or sand.

13. Locate the **palps**, flaplike structures that surround & guide food into the clam's mouth. Beneath the palps, find the **mouth**.

14. Use the scissor to carefully cut the muscle at the top of the foot into right and left halves.

15. Carefully peel away the muscle layer to view the internal organs.

16. Locate the spongy, yellowish **reproductive organs**.

17. Locate that green tissue called the **digestive gland** near the reproductive organs

18. Locate the long, coiled **intestine** extending from the stomach.

19. Follow the intestine through the clam. Find the area near the dorsal/top surface that the intestine passes through called the **pericardial area**. Find the clam's **heart** in this area.

20. Use your probe to trace the path of food & wastes from the incurrent siphon through the clam to the excurrent siphon.

21. Draw a picture of what you see. You may want to use your picture in your notebook as a reference.