

# Clam Anatomy Exercise

## Objective:

Students will observe the inside and outside of a clam. Record on the sheet provided.

Each student will receive the following materials:

fresh clam (in shell), shucked clam, calipers, tray, dissecting tools, clam diagrams

## Outside of the clam shell (use live clam):

- 1) The soft body of the animal is protected by how many shells (valves)? \_\_\_\_\_
- 2) Identify the **anterior and posterior ends**.
- 3) Write a **description of the shell's appearance**: color, shape, growth rings, distinguishing marks

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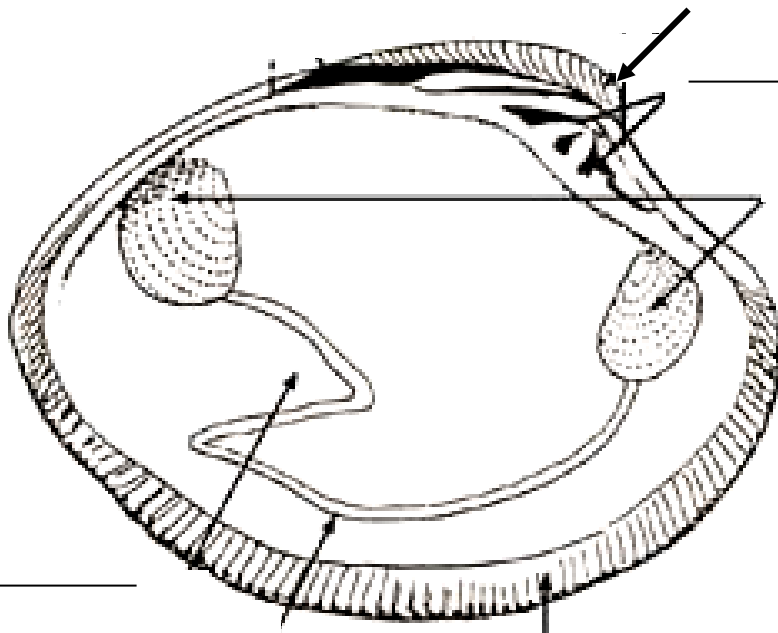
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- 4) **Measure** the clam (1 inch = 25 mm) with calipers:

**Length** \_\_\_\_\_ mm or inches    **Height** \_\_\_\_\_ mm or inches    **Width** \_\_\_\_\_ mm or inches

## Inside of the clam shell (use shucked clam):

- 1) Identify **anterior and posterior ends**, and the **dorsal and ventral sides** of clam shell below.
- 2) Locate the following on the clam shell below and record on blank lines provided: **anterior and posterior muscle scars, umbo, hinge ligament and teeth, mantle attachment, and small teeth**



## Inside of the clam (use shucked clam):

- 1) The thin, whitish flesh lining is called the \_\_\_\_\_.
- 2) Carefully lift the mantle up to expose the internal organs of the clam.

**Locate the following parts of your clam according to the diagram. Place name on the blank line provided.**

**Write below next to the body part if it is used for (P) protection, (E) eating, (B) breathing, or (M) moving.**

**Umbo** \_\_\_\_\_

**Mantle** \_\_\_\_\_

**Anterior adductor muscle** \_\_\_\_\_

**Posterior adductor muscle** \_\_\_\_\_

**Foot** \_\_\_\_\_

**Incurrent siphon** \_\_\_\_\_

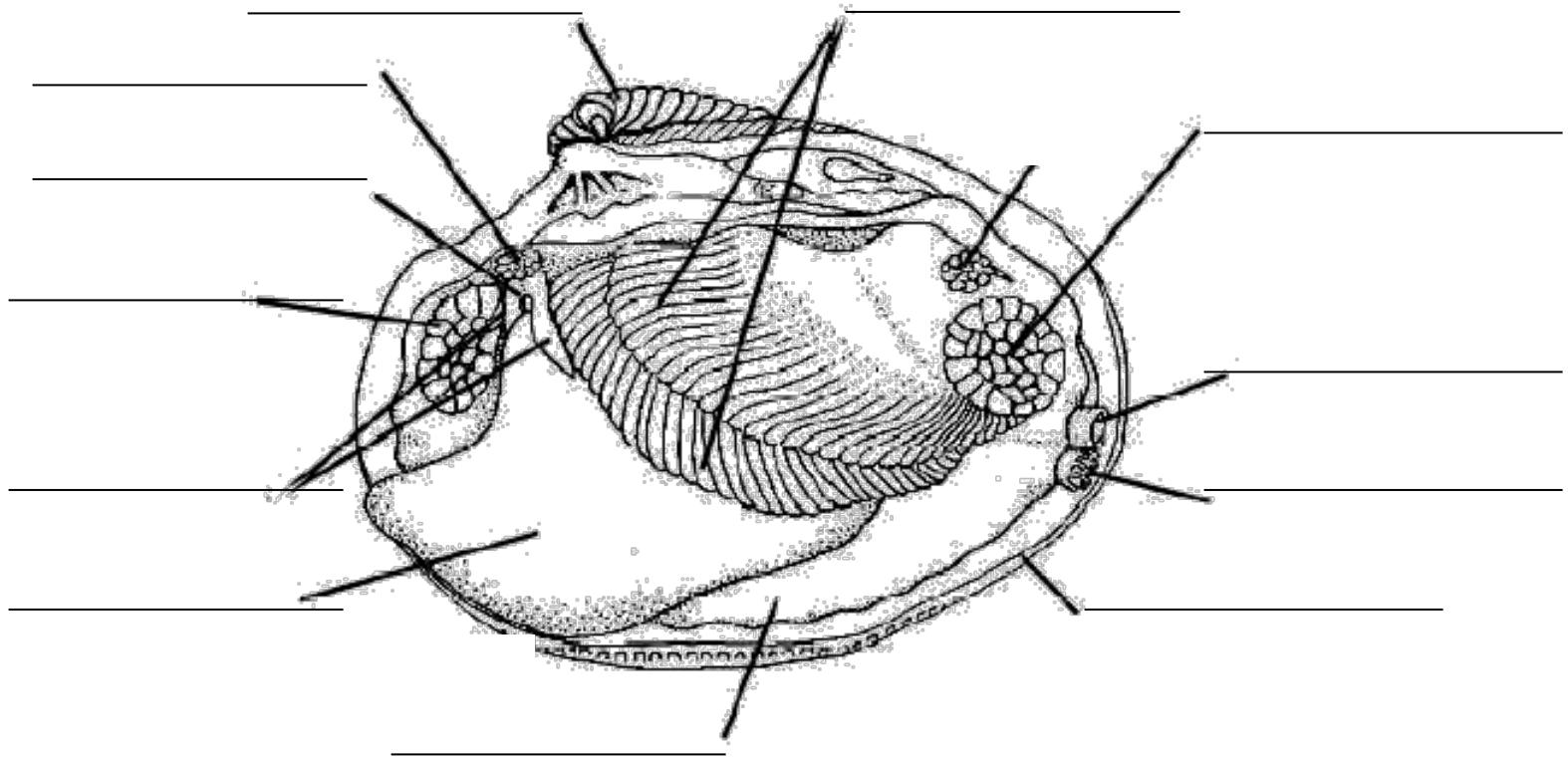
**Gills** \_\_\_\_\_

**Labial Palps** \_\_\_\_\_

**Mouth** \_\_\_\_\_

**Excurrent siphon** \_\_\_\_\_

- 3) Lift the gills to find the stomach and intestines. Can you find the crystalline style or heart?



### Discussion:

- A. What did you learn from working on a fresh clam?
- B. Was it easy or difficult to locate all the body parts? Why?
- C. What are some differences between the anatomy of a hard clam and oyster? Explain.