## **Clam Dissection**

## Introduction

The phylum **Mollusca** includes snails, clams, chitons, slugs, limpets, octopi, and squid. Mollusks have a **radula** or filelike organ for feeding, a **mantle** that may secrete a shell, and a muscular foot for locomotion. Clams are marine mollusks with two **valves** or shells. Like all mollusks, a clam has a mantle which surrounds its soft body. It also has a muscular foot which enables the clam to burrow itself in mud or sand. The soft tissue above the foot is called the **visceral mass** and contains the clam's body organs.

Taxonomy

Kingdom - Animalia Phylum - Mollusca Class - Bivalvia or Pelecypoda

Objective

To study the internal and external anatomy of a bivalve mollusk.

Materials Dissecting pan, dissecting kit, preserved clam



Clam Dissection Questions

## **Pre-lab:**

1. Give the kingdom, phylum, and class for the clam.

2. Give several examples of animals from this phylum.

3. What is the mantle and give its function?

4. What controls the opening and closing of the clam's shell?

5. How do clams move?

6. How do clams feed?

7. Why are clams called bivalves?



**Clam Dissection Questions** 

## Lab Questions:

1. What is the oldest part of a clam's shell called and how can it be located?

- 2. What do the rings on the clam's shell indicate?
- 3. Where is the mantle located in the clam?
- 4. Where are the incurrent & excurrent siphons located and what is their function?
- 5. How do clams breathe?
- 6. Describe the shape of the clam's foot.
- 7. Describe the movement of food from the incurrent siphon through the digestive system of the clam.
- 8. Where is the clam's heart located?
- 9. Why are clam's referred to as "filter feeders"?
- 10. Label the internal structures of the clam:

