

## LESSON 9 -11

### Key Questions

- What does the clam do when it is placed in the sand?

The observation of moving through the sand will probably only be able to be seen if the Instructor is able to come up with some idea for observation, a clear container of some sort, with the clam fairly close to the side of the glass. The clam may not do anything for a few minutes, then the students may observe the foot come out and a slow movement downward or upward towards salt water.

- In the water?

If the clam is able to use the siphon to filter food from the water, it may not move, but the siphon may be observed to be extended a bit for taking in water.

- What parts of the clam can you see?

Umbo, hinge ligament, anterior end, posterior end, growth rings, stress rings, etc.

- Can you see the foot?

The opening for the foot is located nearly opposite from the siphons.

- The siphon(s)?

The black protrusion that can be seen even if the clam is retracted quite far into its shell

- What is the purpose of the excurrent siphon? Incurrent siphon?

The excurrent siphon is located on the hinge side of the clam. The incurrent or larger siphon is on the right. The siphons inside act like straws. The incurrent siphon draws water into the clam's body. The water has plankton in it, which is very small microscopic plant life that clams eat. The excurrent siphon expels waste. During reproduction, the excurrent siphon expels sperm and eggs.

- How does the clam use its foot to move?

The Instructor will explain that the clam may attempt to burrow into the sand using its foot, which is light colored. The students may see the foot change shape as it attempts to burrow into the sand. {The clam will press its foot into the sand, then blood enters the foot and causes it to swell and form a hatchet shaped anchor. The foot muscles will then contract and pull the clam down into the sand.

- How many clam parts can you name?

Student answers will vary, but may include Umbo, hinge ligament, anterior end, posterior end, growth rings, stress rings, the foot which is located nearly opposite from the siphons which are side by side in the black protrusion that can be seen even if the clam is retracted quite far into its shell, the excurrent or smaller siphon, the incurrent siphon or larger siphon.

➤ What happens when you touch the clam?

The handling of the clams will probably cause the siphons to retract.