

# [Clam dissection](https://assignbuster.com/clam-dissection/)

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Lab Report Name: Institution: Lecturer: Course: Date: Lab Report Title: Clam Dissection Introduction The phylum Mollusca consist of various types of species including clams, octopus and squid. Similar to other marine Mollusks, the clams have a mantle that surrounds their soft body. They also have a muscular foot that is mainly used for burrowing into mud or sand.

They are endowed with a visceral mass above the foot that contains the body organs (Postlethwait, et al., 2006). Purpose: To study the internal anatomy of a bivalve mollusk, Materials: dissecting pan, dissecting kit, screwdriver, rubber gloves, preserved clam, safety glasses and a lab apron. Methods: 1 Wear the lab apron and the protective glasses and gloves. 2 Place the clam in the dissecting tray with its dorsal side facing down and use a screwdriver by placing it in the middle of the ventral edges of the valves to separate the valves. 3 Try to situate the adductor muscles. Slide the scalpel with its blade facing the dorsal edge, in the middle of the upper valve and the top tissue layer. 4 Slice the anterior abductor muscle.

One should ensure that the slicing is done close to the shell Results: The observation made was photographed and recorded as follows: Discussion: The various internal organs of the clam are necessary for adaptation. The adductor muscle is mainly used for closing the valves to facilitate breathing both inside the water and outside. The mantle produces the shell, which is mainly used for protective purposes while the foot is used for locomotion. Conclusions: The internal and external anatomy of a bivalve mollusk was identified and thus the objective of the experiment was realized. Earthworm Dissection Introduction: The earthworm is a segmented worm that belongs to a group of animals known as annelids. These are grouped because their bodies are segmented both internally and externally into defined divisions with membranous partitions separating the different segments.

The various segments are similar to each other with exceptions of the head and tail. Other group members include clam worms and tube worms (Campbell, & Reece, 2002). Purpose: To study the internal anatomy of the Lumbricus terrestris Materials: A preserved Lumbricus terrestris, rubber gloves, pins, dissection tray and kit. Methods: 1 The specimen is pinned on the dissection pan and shallow cuts are made on the dorsal side of the clitellum with the use of a scalpel. Caution shoud be exercised while using the scalpel since they are very sharp. 2 The cuts made on the clitellum are spread open using forceps one at a time.

3 Using the dissecting needle, each of the septum is alienated from the central tube. Each of the loosened pieces of skin is pinned to the pan. 4 By using the dissecting needle, the worm is opened up to the first segment. This reveals the pharynx and the ganglion. Results: The dissected body of the specimen is as indicated below Discussion: The earthworm has a distinct shape that tends to narrow at the head to minimize contact with the soil; it also produces a lubricating slime that enables it to move efficiently through the soil.

The digestive system seems capable of extracting nutrients form fibrous food sources. The body is very flexible to enable it to wrap around objects (Campbell, & Reece, 2002). Conclusions: The lab session provided crucial information on the external and internal anatomy of the Lumbricus terrestri. The objective of the experiment was therefore realized.

References Campbell, N. A., & Reece, J. B.

(2002). Biology. San Francisco: Benjamin Cummings. Postlethwait, J. H., Hopson, J. L.

, & Holt, Rinehart, and Winston, inc. (2006). Modern biology. Orlando: Holt, Rinehart and Winston.