

Lesson 2.4

Anatomy of a Conch

Grades: 9-12

Integrated Subjects: Science, Biology, Anatomy

Essential Skills: Labeling, Inferring, Writing

Sunshine State Standards: SC.F.1.4.2, SC.H.1.4.1, SC.G.1.4.1, SC.F.1.4.6

National Science Education Standards: Meets Content Standards: 1) Life science; and
2) Science as inquiry

Duration: 1 – 2 class periods

Objectives:

Students will examine the anatomy of an adult conch and learn:

- ✦ To identify the structures of a conch
- ✦ Determine the function of each structure
- ✦ The methods of dissection

Preparation:

Teacher Preparation:

- ✦ Duplicate appropriate materials
- ✦ Obtain dissection slide show from website

Support materials:

- ✦ If able to dissect a conch: all necessary dissecting equipment

Information Sheets:

- ✦ No. 9 – External Anatomy of a Conch
- ✦ No. 10 – Internal Anatomy of a Conch Key and Diagrams

Activity Sheets:

- ✦ No. 16 – Structure and Function Worksheet

Lesson Plan

Activity 1. Introduction (20 minutes)

Ask the students how to identify an adult conch, and how to tell which is a male or female. Use the photographs on the teaching module for assistance if an adult conch is not available. Have the students discuss what they may expect to find if they dissected a conch, or if they have seen one in the past.

Activity 2. Pseudo-dissection (60 minutes)

Distribute Information Sheet No. 9 and 10, which details the anatomy of an adult conch. Pull up the conch dissection slide show, and have the students follow along and identify parts of the conch anatomy and their function.

Once the slide show is complete, distribute Activity Sheet No. 16 and have the students describe some of the anatomical structures and functions. You may want to give this as a pre-test before completing the dissection, then again as a post-test.

Activity 3. (Optional) Conch Dissection (60 – 120 minutes)

If the material is available, have the students dissect an adult *Strombus* conch using Information Sheet No. 10 and the slide show as guidelines.

Conclusion

Discuss what anatomical structures are particular to conch and what features have helped the conch adapted to their environment.

Bibliography

Little, C. 1965. Notes on the anatomy of the queen conch, *Strombus gigas*. Bulletin of Marine Science. 15(2): 338-358.