Virtual Earthworm Dissection

Introduction: This is used as a make-up lab or a supplemental lab to the earthworm dissection. Students will access a website where they can read about the structures found in an earthworm dissection and label diagrams.

Website: http://www.mhhe.com/biosci/genbio/virtual_labs/BL_14/BL_14.html

A. Initial Question & Introduction

1. What is the purpose of studying an dissecting an earthworm?
2. To what phylum do earthworms belong? ______________________ What is their species name? ______________________
3. What is a coelom? ______________________
4. What is a hermaphrodite? ______________________
5. What do earthworms eat? ______________________

B. Click the Lab Manual to read about the external anatomy of the earthworm.

1. How can you tell the dorsal side from the ventral side? ______________________
2. What are the setae used for? ______________________
3. Where is the clitellum located and what is it used for? ______________________
4. What is the purpose of the excretory openings? ______________________

C. Close the Lab Manual and go to the main page. Drag and drop the labels to the picture. Label the picture below.

D. Click on the "Internal Anatomy" Button and open the lab manual to read about the internal structures.

1. The mouth leads to what structure: ______________________
2. Why is the esophagus hidden in the drawing (and on the real earthworm)? ______________________
3. After the esophagus, food passes through what three structures: ______________________
4. Undigested particles are eliminated through the ______________________
5. The ventral nerve cord consists of a chain of ______________________ and three pairs of
6. What is the purpose of the nephridium? ________________________________________
   .....Where are they located? ____________________________________________
7. What is the purpose of the seminal vesicles? _______________________________________
   .....Where are they located? ____________________________________________
8. Where are the seminal receptacles located? ____________________________________________

E. Close the Lab Manual and go to the main page to view the internal anatomy picture. Drag and drop the labels to the picture. Label the picture below. Note that not all of the structures are indicated on this picture.

F. Click on the "Journal" button. You will be given a series of questions to answer. Answer them on this sheet instead. You can reference the lab manual to help you answer the questions.

1. What part of the digestive system would you see in a cross-section anterior to the gizzard?
2. What structure in the earthworm has a similar function as the human heart? Explain your answer.
3. What do two earthworms exchange during mating? Explain your answer.
4. Describe the difference between a closed and an open circulatory system.
5. Do earthworms have a front and a back end? Explain your answer.
6. What characteristics distinguish an annelid from other worms?