

Module 11

Biology

Read pages 329 – 341 (Green book)

Assignment #1

Read pages 517 – 532 (White book)

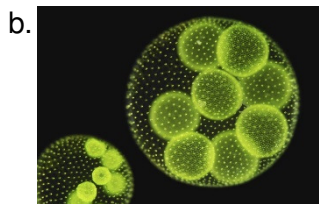
Write the answers on your own paper, not on this sheet.

1. Define the following terms: Write the word you are defining, then the definition.

- | | |
|------------------|----------------|
| a. Invertebrates | h. Polyp |
| b. Vertebrates | i. Medusa |
| c. Epidermis | j. Epithelium |
| d. Mesenchyme | k. Mesoglea |
| e. Collar cells | l. Nematocysts |
| f. Amoebocytes | m. Testes |
| g. Gemmule | n. Ovaries |

2. Are there more animals with backbones or without backbones?

3. Identify the symmetry of each organism as spherical, radial, or bilateral:



4. What is the phylum for sponges?

5. Describe how sponges get their food.

6. If a sponge is soft, does it contain spongin or spicules? What purpose do these substances serve in a sponge?

7. What is the main asexual method of reproduction for a sponge?

8. When does a sponge produce gemmules?

9. Name three types of organisms in Phylum Cnidaria?

10. What two basic forms do all cnidarians have?

11. How are the nematocysts of a hydra different from the nematocysts of a sea anemone?

12. Why don't cnidarians need respiratory or excretory systems?

13. If a jellyfish reproduces sexually, what form is it in?

14. How does coral eat?

15. A large colony of coral is called a reef. Where is the largest coral reef in the world, and how long is it? (Google.)

16. Coral have a symbiotic relationship with a single-celled protozoan. The protozoan provides food to the coral through photosynthesis. The coral provides carbon dioxide and ammonium that the protozoan needs. What type of symbiotic relationship is this: commensalism, mutualism, or parasitism?

17. In 2016, something happened to the largest coral reef. Use the internet to find out what happened and describe it. What do scientists say the cause is?

Module 11

Biology

Read pages 342 – 356 (Green book)

Assignment #2

Read pages 532 – 545 (White book)

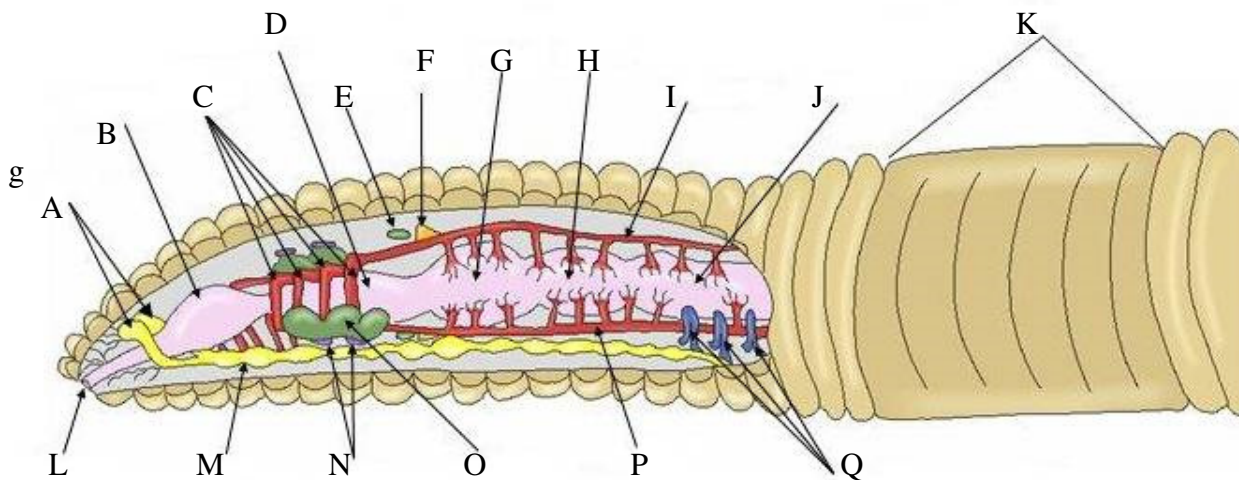
Write on your own paper, not on this sheet.

1. Define the following terms: Write the word you are defining, then the definition.

- | | |
|-----------------------|------------------|
| a. Anterior end | h. Mantle |
| b. Posterior end | i. Shell |
| c. Circulatory system | j. Visceral hump |
| d. Nervous system | k. Radula |
| e. Ganglia | l. Univalve |
| f. Hermaphroditic | m. Bivalve |
| g. Regeneration | |

2. What is the phylum for earthworms?

3. Identify the structures of the earthworm.



4. Name two benefits that earthworms give plants.

5. How do earthworms reproduce?

6. What happens to an earthworm when its cuticle gets dry?

7. What is the phylum for planarians?

8. Why don't planarians need circulatory systems?

9. If a flatworm has no complex nervous system or digestive system, it is more likely to be free-living or parasitic?

10. How do planarians reproduce?

11. What is the phylum for snails and clams?

12. What is another name for a univalve?

13. What is another name for a bivalve?

14. How do snails eat?

15. How many tentacles does a snail have? What do they use them for?