

Chapter 32 ~ Overview of Animal Diversity



1. List the nine key characteristics that are of major importance to animals:

2. What is a **heterotroph**? What is a major difference between a heterotroph and an autotroph?

3. What are the two types of tissues animals have and what are their functions?

4. The five key transitions that are noted in animal evolution are:

a. _____

b. _____

c. _____

d. _____

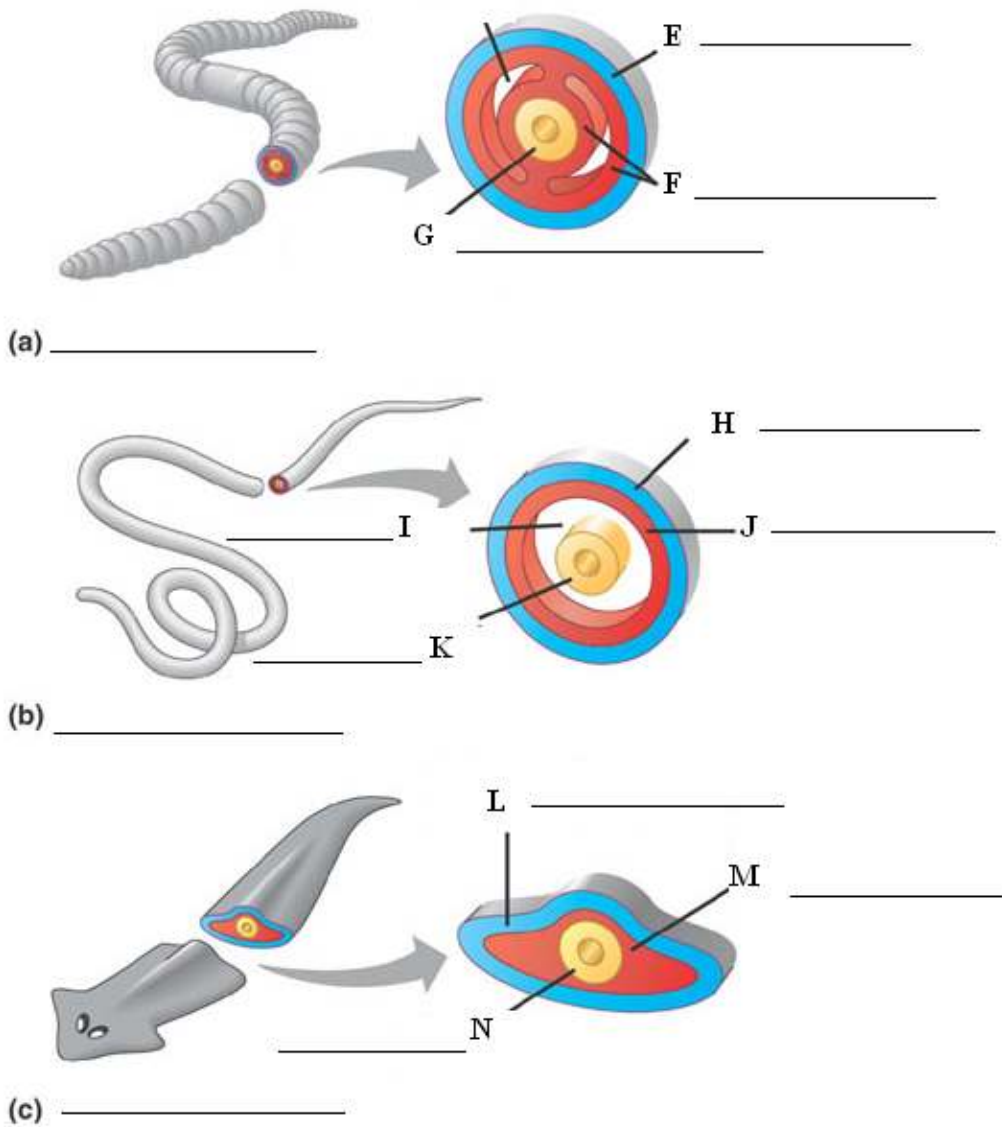
e. _____

5. What are the two types of symmetry and how do they differ?

6. How is bilateral symmetry an evolutionary advantage?

7. Define the term **cephalization**:

8. Label the picture below: **Refer to figure 32.2**



9. Discuss the structure and function of: acoelomates, pseudocoelomates, and coelomates.

10. Why do coelomates have an advantage?

11. What is the difference between an open circulatory system and a closed circulatory system?

12. Define the two main types of bilateral development:

a. **Protostome:** _____

b. **Deuterostome:** _____

13. Describe the cleavage pattern of the following:

a. **Protostome:** _____

b. **Deuterostome:** _____










14. What are the two advantages resulting from early embryonic segmentation?

a. _____

b. _____

15. How would you distinguish **diploblasts** from **triploblasts**?

16. Major Animal Phyla

Phylum	Examples	~	Key Characteristics
			
			
			
			
			
			
			
			
			

17. Define: **Cambrian explosion**

18. What do **Hox genes** do?
