

**BIOLOGY TEST #11** (Chapter 26-27)

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1. What is a vertebrate? **An animal with a backbone, spinal column, or vertebrae.**
2. What is cephalization? **The property animals display when the head end becomes larger due to the concentration of sensory structures in the head.**
3. What is a zygote? **It is the cell formed when a sperm fuses with an egg.**
4. What happens to germ layers as the gastrula grows in size? **They differentiate into different types of tissue.**
5. How does a sponge feed? **Sponges are filter feeders. They use flagella to move water and nutrients through openings, called pores, in the body. Sponge cells extract nutrients directly from the water.**
6. True or False? In vertebrates, the notochord develops into the spinal cord, and the neural tube develops into vertebrae (of the spinal column). **False. The notochord develops into the vertebrae, and the neural tube into the spine.**
7. What is a distinguishing feature of Cnidaria? **The presence of special stinging cells called cnidocytes.**
8. What is a scolex? **It is the specialized head segment of a tapeworm, which is specialized to attach to the host.**
9. True or False? Nemertines are the simplest phylum to exhibit a fully-formed digestive tract and a circulatory system. **True.**
10. What is an exoskeleton? **It is a hard protective covering on the outside of the organism.**
11. What is the defining feature of animals classified in Chordata? **The presence of a notochord at some point in their life cycle.**
12. True or False? There are many times more vertebrates than invertebrates. **False.**
13. **Bilateral** symmetry is when the right half of an organism looks like the left half.
14. True or False? Most animals develop from two germ layers. **False. Most animals develop from three germ layers.**
15. True or False? The body of all mollusks is soft. **True. Although clams have hard shells, their inner body is soft.**
16. True or False? A head-foot is part of the body plan of Annelida. **False. It describes the body plan of mollusks.**
17. Why do insects molt? **Since an exoskeleton is rigid, it does not allow for the organism to grow. As an organism grows with an exoskeleton, the exoskeleton peels off at various times to allow for the growth of the organism. This process is called molting. The main key is that the student understands what molting is and that it happens as a result of the exoskeleton not allowing growth to occur.**
18. Describe the process of complete metamorphosis of a caterpillar to a butterfly. Be sure to include technical terms for all stages. **The caterpillar is the larval stage. It spins a cocoon (called a chrysalis) and enters the next stage (called a pupa). Inside the cocoon, the pupa transforms into a butterfly. The butterfly is the adult stage.**
19. True or False? A nymph is an immature form of an organism from Chordata. **False. Chordates don't have larval or nymph stages.**