

Lower Invertebrates Reading Guide

Name: _____

26-1

1. What are the characteristics of animals?
2. What is the main difference between an invertebrate and a vertebrate?
3. Describe the essential functions that animals carry out to survive. Your textbook describes seven.
4. How are complex animals more advanced than simple animals?
5. What are the characteristics of living things? Explain each.
6. What is the difference between a protostome and a deuterostome?
7. What are the three tissue layers and what are examples of what body structures they form?
8. Describe the different types of body symmetry and how they relate to cephalization.
9. What are body cavities for?

26-2

1. What are the characteristics of phylum Porifera?
2. Why are sponges considered animals?
3. Describe and draw the body plan and structures and functions of sponges.
4. Explain how sponges feed.
5. Explain how the process of respiration, circulation, excretion, response to environment and reproduction occur in a sponge.
6. What is the ecological role of poriferans?

26-3

1. What are the defining characteristics of cnidarians?
2. Explain how cnidocytes and nematocysts function.
3. Describe the body plan of cnidarians.
4. How do cnidarians feed?
5. Explain how the process of respiration, circulation and excretion occur in cnidarian.
6. Describe the nervous system and specialized sensory cells of a cnidarian.
7. How can a cnidarian move?
8. Explain how cnidarians reproduce.
9. Describe three classes of cnidarians, including what is special about each group and an example organism.
10. What is the ecological role of cnidarians?

27-1

1. How is their body shape beneficial to worms?
2. What are the unsegmented worms?
3. What are the characteristics of phylum Platyhelminthes?
4. What does it mean to be an acoelomate?
5. How is a free-living worm different from a parasitic worm?
6. How do free-living worms feed?
7. How do parasitic worms feed?
8. How do flatworms do the processes of respiration and circulation?
9. What special structure do some flatworms have for excretion?
10. Describe the nervous system of flatworms.
11. How do flatworms move?
12. Describe reproduction in flatworms.
13. Describe three classes of flatworms, including what is special about each group and an example organism.

27-2

1. What are the characteristics of phylum Nematoda?
2. What is a pseudocoelom and what is it used for?
3. What is the body plan of a roundworm?
4. How do roundworms have a more advanced digestive system than flatworms?
5. How do roundworms feed?
6. How do roundworms perform the processes of respiration, circulation and excretion?
7. Describe the nervous system of roundworms.
8. Describe reproduction in roundworms.
9. Describe diseases caused by parasitic roundworms in humans.
10. Why is *C. elegans* an important roundworm?

29-1

1. Compare lower invertebrates based on their germ layers, body symmetry, cephalization, coelom and early development. (p. 748 – 749)