

Sample Exam Questions
Biol 460 Midterm

Section A: Multiple choice. Circle the letter of the correct answer (only one is correct). Read each question carefully and each answer completely. Each question is worth 2 points.

1. Indirect development
 - a. occurs when a free-swimming larvae is part of an organism's life cycle
 - b. is often found in terrestrial organisms
 - c. confers a large degree of protection to developing embryos because they are brooded inside the parent
 - d. all of the above

2. Which of the below is NOT true of sponges?
 - a. a planula larvae is part of most sponge's life cycle
 - b. the outer sponge is covered by pinacoderm
 - c. asconoid sponges are the least morphologically complex, followed by syconoid sponges, then leuconoid sponges
 - d. they have no true embryonic tissues

Section B: Classification. Identify each animal with its correct Phylum, Class, or Order. (2 pts each)

1. glass sponges Phylum _____

2. anemones Class _____

3. sea pens Order _____

Section C: Short answer and Essay (various pts depending on the length)

1. Discuss the developmental differences between protostomes and deuterostomes.

2. Label the life stages on the life cycle below...(choose some and practice!)