

Biology Chapter 26: Homework

Hmwrk 26-1

1. What is an animal?
2. What is the difference between vertebrates and invertebrates?
3. What are the seven functions that animals must carry out in order to survive? Describe each.
4. What are the three germ layers of animal embryos? Define each.
5. What is the difference between radial and bilateral symmetry? Name an example of each.

Hmwrk 26-2

1. What is a sponge?
2. Briefly describe the body plan of a sponge. Be sure to define choanocytes, osculum and spicule.
3. Describe the reproduction of sponges. Be sure to define internal fertilization and larva.
4. Name two reasons that sponges are of ecological importance.

Hmwrk 26-3

1. What is a cnidarian?
2. Draw the two many body plans of cnidarians and define polyp and medusa.
3. How does a cnidarian catch and eat prey?
4. What are the three categories of cnidarians? Briefly describe the characteristics of each.
5. Name two reasons that coral are ecologically important.

Biology Chapter 26: Study Guide

Section 1

- Vocabulary

Invertebrate	Deuterostome	Radial symmetry
Vertebrate	Anus	Bilateral symmetry
Feedback inhibition	Endoderm	Cephalization
Blastula	Ectoderm	
Protosome	Mesoderm	

- Know the characteristics of an animal
- Know the difference between a vertebrate and an invertebrate and examples of each
- Know the seven functions that an animal must carry out in order to survive and why
- Know what feedback inhibition is, how it relates to homeostasis and an example
- Know the difference between sexual and asexual reproduction
- Know and understand the diagram on page 660
- Know how cell specialization and levels of organization change as the complexity of organisms increase
- Know the early development of animal embryos
- Know the difference between protosome and deuterostome
- Know the three germ layers of the animal embryo
- Know the difference between radial and bilateral symmetry, be able to name examples of each and label anterior, posterior, dorsal and ventral on a bilateral symmetrical organism
- Know what cephalization is and who it affects
- Know what a body cavity is and what purpose it has

Section 2

- Vocabulary

Choanocyte	Archaeocyte	Gemmule
Osculum	Internal fertilization	
Spicule	Larva	

- Know the characteristics of a sponge
- Know the structure of a sponge including how water moves through it, and how it is supported
- Know how a sponge feeds/eats
- Know and understand the life cycle of a sponge (see diagram on page 666)
- Know how body functions like respiration occur in a sponge
- Know how a sponge responds to stimuli
- Know how a sponge reproduces
- Know the ecological importance of sponges

Section 3

- Vocabulary

Cnidocyte
Nematocyst
Polyp

Medusa
Gastrovascular cavity
Nerve net

Hydrostatic skeleton
External fertilization

- Know the characteristics of a cnidarian
- Know the two body plans of a cnidarian including basic structure
- Know how a cnidarian feeds or catches prey, how body functions like respiration occur, how a cnidarian responds to stimuli, and how a cnidarian moves
- Know how a cnidarian reproduces including the diagram on page 672
- Know the three groups of cnidarians and characteristics of each
- Know the ecological importance of corals