


NAME _____

ECHINODERM QUESTIONS

Chapter 40-1 pp 781-787

MATCH THE VOCAB WORD WITH ITS DEFINITION

PEDICELLARIA	DEUTEROSTOME	BIPINNARIA	MARINE	ABORAL	ORAL
MADREPORITE	AMPULLAE	REGENERATION	PENTARADIAL	OSSICLES	

- _____ Organism in which the embryonic blastopore becomes its anus
- _____ Underside of the starfish's body where the mouth is located
- _____ Dorsal surface of a starfish opposite from the mouth where the anus and madreporite are located
- _____ The ability to regrow lost body parts
- _____ Calcium carbonate plates that make up the endoskeleton in starfish
- _____ Sieve-like plate on the aboral surface that acts as the opening to the water vascular system
- _____ Special kind of radial symmetry seen in sea stars with 5 arms
- _____ Pincher-like structure between the spines which helps keep the starfish's body surface free of foreign objects
- _____ Bulbs on the tops of the tube feet that control the amount of water entering and leaving the tube feet
- _____ Organisms that live in salt water
- _____ Winged  larva seen in echinoderms

MULTIPLE CHOICE.

CIRCLE ALL THAT ARE TRUE. There may be MORE THAN ONE correct answer.

Which of the following is true about symmetry in ECHINODERMS.

- A. ADULTS have bilateral symmetry.
- B. LARVAE have bilateral symmetry
- C. ADULTS have radial symmetry.
- D. LARVAE have radial symmetry.

Echinoderms are the only _____

- A. invertebrate protostomes
- B. invertebrate deuterostomes
- C. vertebrate protostomes
- D. vertebrate deuterostomes

The function of the water vascular system is to _____.

- A. help digest food
- B. provide water pressure to operate the tube feet
- C. pump blood through blood vessels to the body organs
- D. produce larvae

Which of the following is TRUE about starfish reproduction?

- A. They have separate sexes and external fertilization.
- B. They are hermaphrodites with internal fertilization.
- C. They have direct development.
- D. They have indirect development.
- E. They reproduce using both sexual or asexual reproduction.

Echinoderms exchange gases with the water through their _____

- A. nephridia
- B. lungs
- C. gills
- D. skin gills

In a starfish the _____ is involved in the absorption on nutrients.

(Be careful on this one!)

- A. intestine
- B. stomach
- C. digestive gland
- D. nephridia

The _____ stomach in a starfish can be turned inside out through the mouth during feeding.

- A. cardiac
- B. pyloric
- C. intermediate
- D. secondary

Which of the following are parts of the water vascular system?

- A. madreporite
- B. stone canal
- C. ring canal
- D. nerve ring
- E. radial canal

Which of the following are characteristics shared by all echinoderms?

- A. water vascular system
- B. endoskeleton made of ossicles
- C. have cephalization
- D. all are marine
- E. have tube feet which help in locomotion, feeding, gas exchange, and excretion

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Starfish have a number of different structures extending from their surface.

LOOK AT THE DIAGRAM below (also on page 785 in your book).

Match the structure with its description. You can use them more than once.

_____ Pedicellaria

_____ Spines

_____ Skin gills

_____ Gas exchange

_____ Keep surface clear

_____ Protection

_____ Excrete nitrogen waste

