## The Echinoderms

1.	What does the term "echinodermata" mean?  a. jointed leg	2.	Which organism is NOT a member of the phylum Echinodermata?
	b. spiny skin c. multiple eyes d. head-foot		<ul><li>a. sea cucumber</li><li>b. sea star</li><li>c. sea biscuit</li><li>d. sea anemone</li></ul>
3.	Specifically, what type of symmetry do members of the Echinodermata exhibit?	4.	What structure do echinoderms use to pump water into and out of their bodies?
	<ul><li>a. asymmetry</li><li>b. pentaradial symmetry</li><li>c. radial symmetry</li><li>d. bilateral symmetry</li></ul>		<ul><li>a. madreporite</li><li>b. ambulacral groove</li><li>c. tube feet</li><li>d. ring canal</li></ul>
5.	The structures echinoderms use for locomotion are called	6.	In echinoderms, sexes are separate and it is very easy to determine the male from the female.

a. Trueb. False

- 7. What feeding mechanism do echinoderms use to get energy?
  - a. They are producers.
  - b. They are herbivores.
  - c. They are predators.
  - d. They are filter-feeders.
- 9. What is the network of canals that moves water and nutrients around an echinoderm's body and also provides the power for the tube feet to function?
  - a. radial canal system
  - b. water vascular system
  - c. incomplete digestive system
  - d. open circulatory system

10. How do sea star tube feet attach to the substrate?

8. The location on a sea star's body where the tube

feet are located is called the



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- 3. Specifically, what type of symmetry do members of the Echinodermata exhibit?
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- 5. The structures echinoderms use for locomotion are called *tube feet*.
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- 2. Which organism is NOT a member of the phylum Echinodermata?
  - a. sea cucumber
  - b. sea star
  - c. sea biscuit

## d. sea anemone

- 4. What structure do echinoderms use to pump water into and out of their bodies?
  - a. madreporite
  - b. ambulacral groove
  - c. tube feet
  - d. ring canal
- 6. In echinoderms, sexes are separate and it is very easy to determine the male from the female.
  - a. True
  - b. False
- 8. The location on a sea star's body where the tube feet are located is called the *ambulacral groove*.
- 10. How do sea star tube feet attach to the substrate?

Each tube foot contains an ampulla and a podium. When the ampulla squeezes, water is forced into the podium, which then expands and makes contact with the substrate. Special adhesive chemicals are then released by the base of the podium, causing it to stick to the substrate.