

ECHINODERMATA QUESTIONS

1. Describe how the term “penta-radial symmetry” applies to the starfish.
2. How does the surface of a starfish, or sea urchin relate to the phylum name?
3. On which surface of the starfish is the mouth located? Where is the mouth in relation to the stomach?
4. On which surface is the anus located? Where in the anus in relation to the stomach?
5. Compare your answers to questions 3 & 4, to the location of the stomach in humans.
6. Compare and contrast with the “stomachs” of the sea star with the ...
 - a. the crayfish
 - b. the earthworm
7. What is the function of the pyloric caeca?
8. What is the function of the gonads?
9. What system does the water vascular system represent in a sea star?
10. How many radial canals does the sea star have? How many ring canals?
11. What is circulated in the water vascular system?
12. What system is the equivalent of the water vascular system in humans?
13. What is circulated in the human vascular system?
14. What advances do Echinoderms have over Arthropods that lead biologists to classify them as closer relatives of the Chordates? (Chordates are the next phylum along the evolutionary scale, after the Echinoderms.)