

NAME _____

STARFISH LAB QUESTIONS

LATIN meaning

KINGDOM _____

PHYLUM _____

CLASS _____

1. Use the words in the word bank below to identify on which surface is each of the following located?

	ORAL	ABORAL	BOTH
1. <i>Chlamydia trachomatis</i>	100%	100%	100%
2. <i>Neisseria gonorrhoeae</i>	100%	100%	100%
3. <i>Trichomonas vaginalis</i>	100%	100%	100%
4. <i>Herpes simplex virus</i>	100%	100%	100%
5. <i>Cytomegalovirus</i>	100%	100%	100%
6. <i>Human immunodeficiency virus</i>	100%	100%	100%
7. <i>Epstein-Barr virus</i>	100%	100%	100%
8. <i>Human papillomavirus</i>	100%	100%	100%
9. <i>Varicella-zoster virus</i>	100%	100%	100%
10. <i>Measles virus</i>	100%	100%	100%
11. <i>Mumps virus</i>	100%	100%	100%
12. <i>Poliovirus</i>	100%	100%	100%
13. <i>Rotavirus</i>	100%	100%	100%
14. <i>Adenovirus</i>	100%	100%	100%
15. <i>Coxsackievirus</i>	100%	100%	100%
16. <i>Echovirus</i>	100%	100%	100%
17. <i>Reovirus</i>	100%	100%	100%
18. <i>Parvovirus B19</i>	100%	100%	100%
19. <i>Hepatitis A virus</i>	100%	100%	100%
20. <i>Hepatitis B virus</i>	100%	100%	100%
21. <i>Hepatitis C virus</i>	100%	100%	100%
22. <i>Hepatitis D virus</i>	100%	100%	100%
23. <i>Human coronavirus</i>	100%	100%	100%
24. <i>Human metapneumovirus</i>	100%	100%	100%
25. <i>Human rhinovirus</i>	100%	100%	100%
26. <i>Human coronavirus</i>	100%	100%	100%
27. <i>Human coronavirus</i>	100%	100%	100%
28. <i>Human coronavirus</i>	100%	100%	100%
29. <i>Human coronavirus</i>	100%	100%	100%
30. <i>Human coronavirus</i>	100%	100%	100%
31. <i>Human coronavirus</i>	100%	100%	100%
32. <i>Human coronavirus</i>	100%	100%	100%
33. <i>Human coronavirus</i>	100%	100%	100%
34. <i>Human coronavirus</i>	100%	100%	100%
35. <i>Human coronavirus</i>	100%	100%	100%
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40. <i>Human coronavirus</i>	100%	100%	100%
41. <i>Human coronavirus</i>	100%	100%	100%
42. <i>Human coronavirus</i>	100%	100%	100%
43. <i>Human coronavirus</i>	100%	100%	100%
44. <i>Human coronavirus</i>	100%	100%	100%
45. <i>Human coronavirus</i>	100%	100%	100%
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69. <i>Human coronavirus</i>	100%	100%	100%
70. <i>Human coronavirus</i>	100%	100%	100%
71. <i>Human coronavirus</i>	100%	100%	100%
72. <i>Human coronavirus</i>	100%	100%	100%
73. <i>Human coronavirus</i>	100%	100%	100%
74. <i>Human coronavirus</i>	100%	100%	100%
75. <i>Human coronavirus</i>	100%	100%	100%
76. <i>Human coronavirus</i>	100%	100%	100%
77. <i>Human coronavirus</i>	100%	100%	100%
78. <i>Human coronavirus</i>	100%	100%	100%
79. <i>Human coronavirus</i>	100%	100%	100%
80. <i>Human coronavirus</i>	100%	100%	100

_____ Mouth

_____ Skin gills

Anus

_____ Ambulacral groove

_____ **Madreporite**

Pedicellariae

Spines

_____ Tube feet

2. How does a starfish use AUTOTOMY to escape predators?

3. Starfish have an _____ skeleton made of calcium carbonate plates called _____

4. What do the typhlosole in an earthworm, the ridges on the gills in a clam, and the skin (dermal) gills in a starfish have in common?

All of these _____

5. Echinoderms are the only _____

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


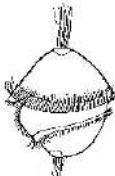
6. In earthworms and many other organisms the function of the intestine is to absorb nutrients. How do starfish absorb nutrients if they don't have an intestine?

7. Put these parts of the water vascular system in the correct sequence.

Ampullae	ring canal	stone canal	radial canal
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madreporite → _____ → _____ →
 _____ → _____ → tube feet

8. Which 2 structures are found INSIDE THE AMBULACRAL RIDGE?

9. COMPARE		
Looks like ?		
What is it called?		
Which PHYLUM has this kind of larva?		

10. MARK the BOX that shows which characteristics the following organisms you dissected have.

	EARTHWORMS	CLAMS	STARFISH
Uses sexual reproduction			
Uses asexual reproduction			
Have separate sexes (males & females)			
Are hermaphrodites			
Internal fertilization			
External fertilization			
Have direct development			

Have indirect development			
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11. Use words in the word bank below to identify the correct part of the stomach.

CARDIAC STOMACH	PYLORIC STOMACH
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_____ Extruded out through mouth during feeding

_____ Stays inside the starfish during feeding

_____ Connects to the anus

_____ Connects to the digestive glands

_____ Connects to the mouth

12. COMPARE/CONTRAST THE FOLLOWING

	LOCATION	BODY SYSTEM	CONNECTS
NERVE RING			
RING CANAL			

Circle ALL that apply to STARFISH:

Invertebrate protostomes

Invertebrate deuterostomes

Vertebrate deuterostomes

blastopore → mouth
(Determinate spiral cleavage)

blastopore → anus
(indeterminate radial cleavage)

NO CEPHALIZATION

CEPHALIZATION

EXOSKELETON

ENDOSKELETON

OPEN CIRCULATION

CLOSED CIRCULATION

HERMAPHRODITES

SEPARATE SEXES

ASEXUAL REPRODUCTION

SEXUAL REPRODUCTION (Carefull!)

INDIRECT DEVELOPMENT

DIRECT DEVELOPMENT

EXTERNAL FERTILIZATION

INTERNAL FERTILIZATION

NAME THE BODY ORGAN:

General term for reproductive organs _____

Makes eggs _____

Makes sperm _____

Makes bile and absorbs nutrients _____

Opening for water entering the water vascular system _____

Connects stone canal with radial canals _____

Connects madreporite and ring canal _____

Muscular bulb that controls water entering tube feet _____

Keeps surface free of foreign objects _____

Skin extensions that exchange gases with water _____

Gives Echinoderms their name and provides protection _____

Groove on underside of arms that holds the tube feet _____

Ridge inside each arm that contains the radial canal and radial nerve _____

Calcium carbonate plates that make up the skeleton _____

Senses light at the ends of a starfish's arms _____

Two body parts that excrete nitrogen waste
& help with osmoregulation _____ and _____

Found in the ambulacral groove; help in locomotion,
grabbing food, & prying open bivalve shells _____

Part of the nervous system that encircles the
starfish's mouth and connects the radial nerves together _____

Part of the water vascular system that encircles
the starfish's mouth and connects the radial canals together _____