

OYOS 13

- 13.1 It has nothing in common with it besides feeding habits and ~~that~~ it stays immobile as an adult
- 13.2 The tunic or leathery covering
- 13.3 The oral cirri
- 13.4 Blood cells
- 13.5 cartilage
- 13.6 an artery
- 13.7 a vein
- 13.8 optic lobes
- 13.9 signals to the brain can't get to the brain
- 13.10 The placenta
- 13.11 external fertilization and oviparous development.
- 13.12 NO
- 13.13 adult lampreys are parasites
- 13.14 The olfactory lobes
- 13.15 The shark couldn't stay upright in the water
- 13.16 Its teeth
- 13.17 It thinks its an electrical signal from their prey
- 13.18 It is a ray.
- 13.19 ~~that~~ they might be right, but it doesn't have to be in class Osteichthyes
- 13.20 the liver
- 13.21 ventral aorta
- 13.22 larval stage
- 13.23 It can't breathe through its lining of its mouth
- 13.24 a toad

Study Guide 13

- a. **Vertebrae**: segments of bone or some other hard substance that are arranged into a backbone
- b. **Notochord**: A rod of tough, flexible material that runs the length of a creature's body, providing the majority of its support
- c. **Endoskeleton**: A skeleton on the inside of a creature's body, typically composed of bone or cartilage.
- d. **Bone marrow**: A soft tissue inside the bone that produces blood cells
- e. **Axial skeleton**: The portion of the skeleton that supports and protects the head, neck, and trunk
- f. **Appendicular skeleton**: The portion of the skeleton that ~~is~~ attaches to the axial skeleton and has the limbs attached to it
- g. **Closed circulatory system**: A circulatory system in which the oxygen-carrying blood cells never leave the blood ~~and~~ vessels
- h. **Arteries**: Blood vessels that carry blood away from the heart
- i. **capillaries**: tiny, thin-walled blood vessels that allow the exchange of gases and nutrients between the blood and the cells of the body
- j. **veins**: blood vessels that carry blood back to the heart
- k. **Olfactory lobes**: The lobes of the brain that receive signals from the receptors in the nose
- l. **Cerebrum**: the lobes of the brain that integrate sensory information and coordinate the creature's response to that information

- m. **Optic lobes**: The lobes of the brain that receive signals from the receptors in the eyes.
- n. **Cerebellum**: The lobe that controls involuntary actions and refines muscle movement.
- o. **Medulla Oblongata**: The lobes that coordinate vital functions, such as those of the circulatory and respiratory systems, and transport signals from the brain to the spinal cord.
- p. **Internal fertilization**: The process by which the male places sperm inside the female's body, where the eggs are fertilized.
- q. **External fertilization**: The process by which the female lays eggs and the male fertilizes them once they are outside the female.
- r. **Oviparous development**: development that occurs in an egg that is hatched outside the female's body.
- s. **Oviviparous development**: development that occurs in an egg that is hatched inside the female's body.
- t. **Viviparous development**: development that occurs inside the female, allowing the offspring to gain nutrients and vital substances from the mother through a placenta.
- u. **Anadromous**: A life cycle in which creatures are hatched in fresh water, migrate to salt water as adults, and then go back to fresh water to reproduce.
- v. **Bile**: A mixture of salts and phospholipids that aids in the breakdown of fat.
- w. A heart chamber that receives blood.

X. Ventricle: A heart chamber from which blood is pumped out

XI. Ectothermic: Lacking an internal mechanism for regulating body heat

Z. Hibernation: A state of extremely low metabolism and respiration, accompanied by lower-than-normal body temperatures.

2. a. Amphibia b. Chondrichthyes c. Subphylum Cephalochordata
d. Osteichthyes e. Urochordata f. Agnatha

3. metamorphosis from larva to adult

4. more flexible and weaker

5. a capillary

6. Red blood carries oxygen in blood

7. Hemoglobin

8. amphibian has a small cerebellum

9. they are enlarged

10. internal, oviparous

11. Salmon skeletons are less flexible

12. ~~are~~ they are anadromous

13. electrical field sensor

14. \bar{I} senses vibrations in the water

15. it is used for balance ~~also~~ a weapon

16. Rays have thin tails, and skates have thick tails.

17. a. esophagus b. brain c. spinal cord d. stomach

e. air bladder f. kidney g. gonad h. anus

i. intestine j. pyloric caeca k. gall bladder

l. liver m. heart n. gills

18.

Regular Notes 13

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