Jonathan Quang 3/2/2015

Prelab #3 SLS44-09/Period 4,5

1.When dissecting the frog, it should be ventral side up.

2. The liver is located near the anterior end of the frog's body cavity and is the largest digestive organ. It produces bile, which assists in digesting food. The gall bladder is a small, greenish brown organ located near the liver that stores bile. The long thick tube along one side of the liver which helps break food down. The long twisted tube that connects to the stomach is the small intestine, which absorbs nutrients from food.

3. The trachea connects the mouth to the lungs.

4. Frogs exchange gases through the skin and lungs.

5. The three types of blood vessels are capillaries, arteries, and veins.

6. The frog of a heart differs from the heart of a human because the heart of a frog has three chambers where as the heart of a human has four chambers. The heart of a frog has a left and right atrium and one ventricle. This is less efficient than having two atria and two ventricles because both oxygenated and deoxygenated blood are mixed at the ventricle. In a human's four chambered heart, deoxygenated blood enters the heart and leaves oxygenated.

7. The function of fat bodies is to store energy for use when hibernating or breeding.

8. Frog reproduction is different from human reproduction because frog fertilization is done externally. The eggs of a female frog leave through its cloaca and into the water. The sperm of a male frog is secreted into the water where it fertilizes the egg. In humans, sperm enters the female's body to fertilize an egg.

9. Mating in frogs generally involves assuming a mating position called amplexus. The male frog climbs onto the female's back, then uses his forelegs to grip around her middle. Most of the time, a tadpole hatches from a frog egg. As time passes, the tadpole begins to develop rear legs and then the forelegs. The tadpole eventually develops the internal organs it needs to live life as an adult and its tail begins to be absorbed. Eventually, the tadpole transforms into a frog.

10. The respiratory system changes as the frog undergoes metamorphosis from a tadpole to an adult frog, starting with the gills of a tadpole. As the tadpole matures, its gills are gradually replaced with lungs that grow in size.

11. The main structure of the excretory system that in both humans and frogs are the kidneys.

12. The function of the kidneys is to remove cellular wastes that have entered the bloodstream and excrete it through the cloaca. Liquid wastes leave the kidney and enter the ureter where it is stored in the bladder. When it is time, the liquid waste leaves through the cloaca.

13. The frog's nervous system is composed of three mains structures, the brain, the sense organs, and the spinal cord.

14. The brain of a frog differs from one of a human since the brain of a frog is smaller and shaped differently. While the human brain is shaped like two hemispheres of cauliflower, the brain of a frog is more cylindrical with various glands and lobes arising from it like sacs.

Bibliography

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