

Frog Reading Tour Part 1&2 (5ec)

(This page due by Wed)

The arrival of the amphibians

1. The development of lungs and leg-like fins in some of the early bony fishes was probably what?

2. The class name "Amphibia" means: _____
3. What are some reasons that the amphibian's life cycle relates to the name's meaning from Question 2?

Characteristics of the amphibians

1. Young amphibians are : _____-bound. When they become adults the change to: _____
2. This series of changes is called: _____
3. Compare Amphibians differences to other vertebrates animals:
 - a. Bodies are covered with thin, flexible, moist skin instead of: _____
 - b. feet are : _____
 - c. toes are soft and lack: _____
 - d. the young larval forms of amphibians (ex: tadpoles) are vegetarian. BUT adults are: _____
 - e. Respiration is by: _____
 - f. Hearts are ____-chambered in larvae and ____-chambered in adults. Circulatory system is also developed
 - g. Eggs are fertilized _____ as soon as they are laid
 - h. metamorphosis from _____ larval stage to adult form

Orders of Amphibia

1. _____ has a few legless tropical, wormlike creatures. They are also called: _____
2. Caudata or Urodela are amphibians that have _____ throughout life. Salamanders & _____ are examples.
3. _____ or Anura includes frogs & _____. They _____ tails in adult life. They go from living _____ life as a larva to a semiaquatic or _____ life as an adult.

The Salamanders

1. Salamanders have _____ instead of their ancestors which had cartilage.
2. Comparing salamanders and lizards:
Both have: _____
Differences are: _____
3. What are some salamander protection abilities? _____
4. The presence of _____ is a larval trait that mudpuppy's maintain throughout their lives.
5. Tiger salamanders can grow: _____ and remain _____ throughout their lives.
6. Small salamanders that are in the "land dwelling stage" are called: _____

Toads & Frogs

1. What is the biggest change for adult toads & frogs, from their younger stage? _____
2. Other changes include: hind legs with an _____, ankle bones that are _____
3. Their front legs are shorter, but how does this help? _____
4. Modern toads & frogs have wide mouths & _____ sticky tongues
5. Which is more able to live on land? Frogs or toads? _____
6. A toad starts as a black _____ that eventually grows _____, _____ its tail, and hops to land.
7. A toad uses its back legs to _____
8. A toad has _____ glands to help what? _____
9. The most common frog in the US is: _____
10. The bullfrog gets its name because _____ and likes living where the best? _____ why? _____

Economic Importance of Frogs

(This page due by Fri- and will be checked in!)

1. What are the 2 main factors of a frog's economic importance?

- a. _____
 b. _____

Anatomy of the Frog:

1. Describe the external features of the frog:

2. The front legs are: _____. The frog has _____ toes, and _____ used for swimming.

3. The inner toe (or _____) of the male is _____ - especially for the breeding season.

4. The front legs are used to _____ the body on land, and to _____ after a leap.

5. The hind legs are developed and adapted for _____ and _____

6. The thigh & calf are very _____. The ankle and toes are greatly _____ and form a foot longer than the _____ leg. A broad, flexible _____ connects the _____ toes which is efficient for swimming.

Frog's Head

7. Frog's eyes can be pulled into their sockets and pressed against the roof of the mouth. Why is this important?

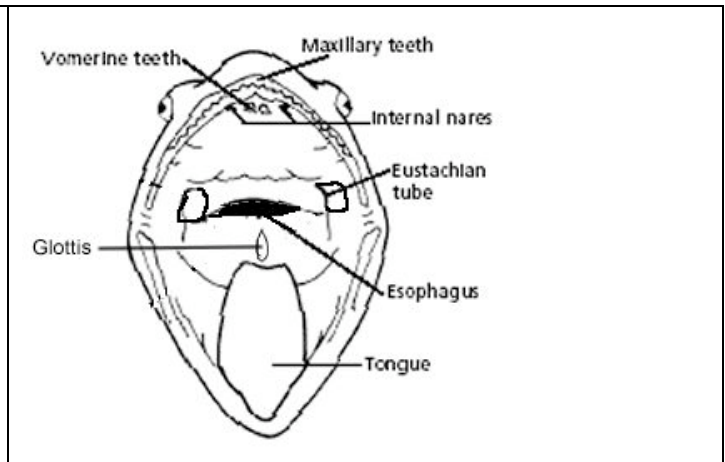
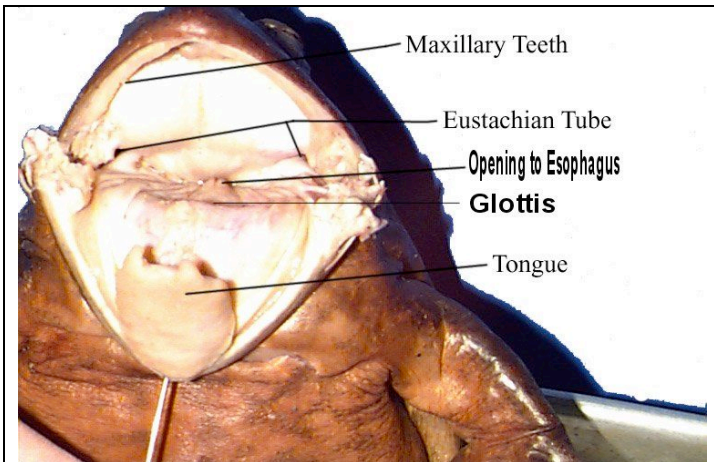
8. How many eyelids does a frog have? _____. The "nictitating membrane" is useful how?

9. Describe the nostrils, where they are, and why they are important in this position?

10. The frog has no external ears, but what does it have to help hearing? _____

Frog's Mouth

11. Describe the frog's unique tongue & mouth: _____



12. Describe how a frog "croaks" on land: _____

13. Describe how a frog "croaks" underwater: _____

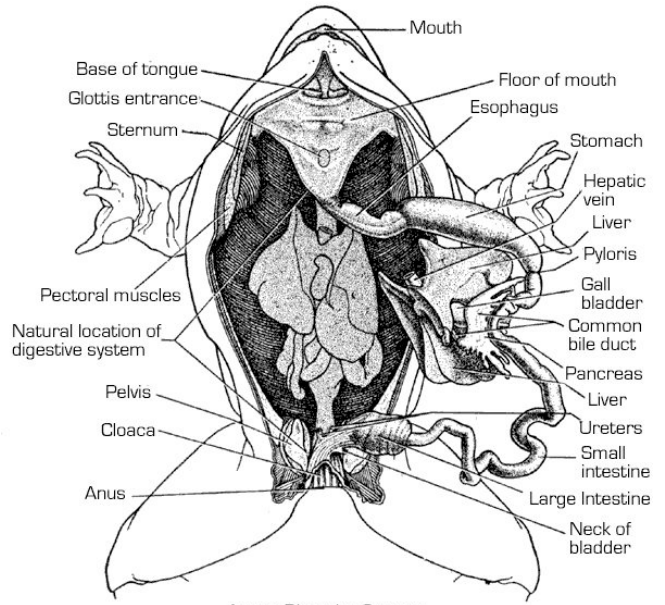
Terms & Locations to know	
<p>1. Vomerine Teeth: Used for holding prey</p> <p>2. Internal Nares (nostrils) breathing</p> <p>3. Eustachian Tubes: equalize pressure in inner ear</p> <p>4. Glottis : Tube leading to the lungs (trachea)</p>	<p>5. Gullet: Opening leading to the esophagus</p> <p>6. Tongue: Front attached, aids in grabbing prey</p> <p>7. Tympanic Membrane: eardrum, located behind eyes</p> <p>8. Nictitating Membrane: clear eyelid, protects the eye</p> <p>9. Maxillary Teeth: Used for holding prey</p>

Frog Reading Tour (parts 3&4)

The Digestive System of the Frog

1. What makes it possible for the frog to swallow large prey?

2. The gullet leads to what? _____
3. The stomach joins the small intestine at a point called the _____ and goes into the small intestine through the _____ valve.
4. The small intestine has several loops and is supported by the _____ (membrane)
5. The small intestine leads to the short, broad colon or _____ intestine. The lower end of this leads to a cavity called the _____.
6. Waste materials, eggs & sperm pass from the _____ through the cloacal opening.
7. The large ____-lobed liver is the storage area for bile. Bile collects in the _____
8. Another digestive gland: _____ also secretes digestive fluids, along with tiny gastric glands.



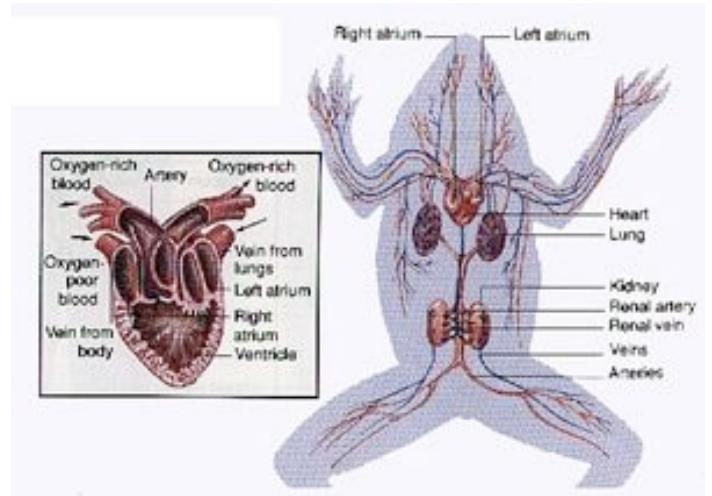
Anuran Digestive System
The natural location of the digestive system is shown by the shaded organs in the middle of the trunk. The anus is cut open to show the walls of the cloaca.

The Respiratory System of the Frog

1. What allows the frog to stay under water for so long?
Describe the frog's respiration underwater.

2. Describe how the frog "breathes" with no diaphragm, chest cavity or ribs.

3. What is the name of the tube that leads to the lungs?



The Circulatory System

1. A frog has how many chambers in its heart? _____
2. Describe these chambers: _____

