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:
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: are examples.
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.
inic as a faiva to a semiadattic of inic as an addit.
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
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 now does this help?
3. Their front legs are shorter, but how does this help? 4. Modern toads & frogs have wide mouths &
5. Which is more able to live on land? Frogs or toads?
7. A toad uses it's back legs to
8 A toad has so olands to help what?
8. A toad hasglands to help what?9. The most common frog in the US is:
10. The bullfrog gets its name because and likes living
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!)

3. Eustachian Tubes: equalize pressure in inner ear

4. Glottis : Tube leading to the lungs (trachea)

1. What are the 2 main factors of a fi	rog's economic importa	ance?	
a			
b			
Anatomy of the Frog:			
1. Describe the external features of the	he frog:		
2 The front legs are:	The frog has	toes and	used for swimming. fally for the breeding season. after a leap. greatly and connects the
3 The inner toe (or	of the male is	- especi	ally for the breeding season
4 The front legs are used to	the body on lar	nd and to	after a lean
5 The hind legs are developed and a	danted for	and	urer a reap.
6 The third & calf are very	dupted for	The ankle and toes are	oreatly and
form a foot longer than the	leg A bı	and flevible	connects the
toes which is efficient for s	wimming	oad, fickible	connects the
Frog's Head	willing.		
7. Frog's eyes can be pulled into the	ir sockets and pressed :	against the roof of the	mouth. Why is this important?
7. I log 5 cycs can be puned into the	ii sockets and pressed t	igamst the 1001 of the	mouth. Why is this important:
8. How many eyelids does a frog have	ve? The "r	nictitating membrane"	is useful how?
0 Describe the control of the contro			0
9. Describe the nostrils, where they a	are, and why they are in	nportant in this position	on?
10. The frog has no external ears, bu	t what does it have to b	neln hearing?	
Frog's Mouth	t what does it have to i		
11. Describe the frog's unique tongu	ia & mouth:		
11. Describe the flog's unique tongu	.c & mouth.		
Max	xillary Teeth	Vomerine teeth	Maxillary teeth
		vomerine teetin	
	Eustachian Tube	1 6	Internal nares
R STATE OF THE STA		182	182
	— Opening to Esophagus	Ist en	Eustachlan
	Glottis		Ti) tube
		Glottis (1. 8
	— Tongue	Giottis TII	4 XVI
		M''	Esophagus
	To the second se	1 111	1//
			Tongue
			//
		1	
		27	=-
12. Describe how a frog "croaks" on	land:		
12 December 1	1		
13. Describe how a frog "croaks" un	derwater:		
Terms & Locations to know		5. Gullet: Opening lea	ding to the esophagus
1. Vomarine Teeth: Used for holding p	orey		ned, aids in grabbing prey
2. Internal Nares (nostrils) breathing	-		ne: eardrum, located behind eyes

8. Nictitating Membrane: clear eyelid, protects the eye

9. Maxillary Teeth: Used for holding prey

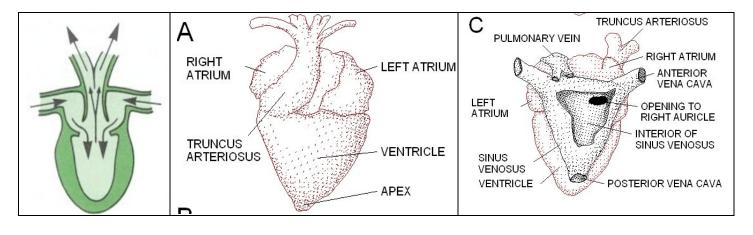
Frog Reading Tour (parts 3&4)

The Digestive System of the Frog

1. What makes it possible for the frog to swallow large prey?		Mo	uth
2. The gullet leads to what?	Base of tongue		Floor of mouth
3. The stomach joins the small intestine at a point called the	Sternum		Esophagus
and goes into the small intestine			Stomacl
through thevalve.	7 DA		Hepati vein
4. The small intesting has several loops and is supported by	SOUND		Liver
the (membrane) 5. The small intestine leads to the short, broad colon or	A	19/10	Pyloris
	Pectoral muscles	A AD ME	Gall bladde
intestine. The lower end of this leads to a cavity	Natural location of digestive system		Commor bile duct
called the	11		Pancreas
6. Waste materials, eggs & sperm pass from the	Pelvis		Liver
through the cloacal opening.	Cloaca		Ureter Small
7. The largelobed liver is the storage area for bile. Bile	. / T		intestir
8. Another digestive gland: also	Anus		Large Intestir
secretes digestive fluids, along with tiny gastric glands.	// /		Neck of bladder
secretes digestive fluids, along with tiny gastric grands.			
		uan Digestive System	,
		of the digestive system is shown by nk. The anus is cut open to show th	
The Respiratory System of the Frog			
1. What allows the frog to stay under water for so long?		Right strium	Left atrium
Desribe the frog's respiration underwater.		1	Les anum
		ALL MY	A WE
		W WALL	
	Oxygen-rich Artery Oxygen-rich	TIME	
	thood blood		
	-300		Lung
	Oxygen- Vein from lungs	- Wash	1
2. Describe how the frog "breathes" with no diaphragm,	blood Left atriu	m ald	Kidney Renal arter
chest cavity or ribs.	Vein from atrium	(無)	Renal vein
	body Ventricle		Veins Aneries

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: _



The Excretory System (how LIQUID wastes are removed)						
1. This is the vital organ where carbon dioxide is discharged (remo						
2. These are the principal organs of excretion.						
3. The renal arteries and the renal veins carry blood to the	to remove liquid wastes.					
4. Urine collects in the, flows to the	through tiny tubes called					
The frog's nervous system						
1. The frog's brain is advanced over the						
The lobes lie at the anterior end of the brain						
The frog's brain is advanced over the The lobes lie at the anterior end of the brain nerves extend from the brain.						
The reproductive system						
1. During the mating season the thumb of theis er	nlarged.					
2. The male reproductive organs are 2 oval, white/yellow organs called:						
3. The female reproductive organs are a large lobed pair of organs called:						
4. During breeding season the eggs enlarge and burst the thin ovar	y walls, and are					
Fertilization & Development of the Eggs						
1. Describe the role of the male in fertilizing the eggs and helping	the female release them:					
2. What's the purpose of the "jelly coat"?						
3. What does the yolk cause the eggs to do in the water?						
From tadpole to adult						
1. In your own words, summarize what happens during this metan	porphosis from the tadpole to the adult from					
1. In your own words, summarize what happens during this metan	iorphosis from the tadpole to the adult frog					
Regeneration in Amphibia						
1. Describe the regenerative abilities of salamanders in comparison to frogs.						
1. Desertoe the regenerative admittes of salamanacis in comparison to nogs.						
2. How does being cold blooded help the amphibian?						