

Name _____ date _____ hour _____

Frog dissection – 1st day Observations and Discovery



American Bullfrog

Classification of the American Bullfrog:

1. Kingdom _____
2. Phylum _____
3. Class _____
4. Genus _____
5. Species _____

6. List several habitats where frogs can be found (not water, swamp etc. – I mean continents, countries etc.) Can they be found everywhere?

7. Observe the color and texture of the frog's skin (top and bottom) - Describe it. How are these characteristics advantageous?

8. Examine the front limbs and hind limbs of the frog.

Similarities

1.

2.

3.

Differences

1.

2.

3.

9. Examine how the head and neck are connected, how is it different than a human, chicken, dog etc?

10. Open the frog's mouth and look into it. While looking, press down on the eyeballs from the outside of the head. What happens in the mouth? Why is the frog anatomically designed for this?

11. Where do the Eustacean tubes lead? _____

12. Where does the glottis lead? _____

13. Examine the tongue. How and where is it attached to the mouth? What makes it very different from humans?

NAME _____ DATE _____ BLK _____

FROG DISSECTION DAY 2 FROGLEGS ANYONE?

1. Remove a piece of the frog's skin and prepare a microscope slide.

Sketch of the exterior side

Sketch of the interior side

Provide a brief description:

2. Peel the skin off of one of the hind legs. Sketch the entire leg showing the association of the muscles with the bones.

3. Think about the joints in the frog's front and hind limbs. Describe at least two joints you suspect they have and where exactly they are. Use the scientific names of all bones and joints used in your description.

4. Remove some muscle tissue and prepare a slide.

Sketch of tissue

Description and origin of tissue

5. Remove the gastrocnemius from the skeleton. How is the skeleton in this area different from the skeleton of humans?

6. Remove the femur and place it in the jar of vinegar. What will the vinegar do to the bone over time?

7. What does "sexual reproduction" mean?

8. Do frogs reproduce? Describe how most frogs mate.

9. Describe the lifecycle of a frog – What are its stages of development?

10. Give 4 ways the anatomy of a tadpole must change to become a mature frog.

Frog Dissection Day 3

I thought it would be fun to see if you could find the organs of the digestive system in a person BUT, of course, I have no human cadavers so.....your frog has volunteered to be dissected instead!

Opening the body cavity – I will give some brief instructions in class before we get to this part but here are the basics:

1. Go slow, be careful with the sharp stuff!
2. Hold up the skin covering the belly (ventral) side of the frog
3. Use your scissors to cut this skin down the middle of the belly from the anal opening to the neck. Holding the skin up will ensure that your scissors do not cut organs that are underneath the skin.
4. Peel back the layers of the skin. You can use your scissors to cut off these skin flaps so you can see the internal organs better.
5. Do not remove all the organs or threaten people with their remains!!
6. Keep it neat – do not make a mess of the frog.
7. Do not throw any pieces of skin or organs in the sink. All pieces and parts need to go in a biohazard bag when you are done.

Identifying organs – try to find the organs listed below. Call me over when you think you can identify each one for me. You must have my signature to get the points for this part of the dissection packet. 😊

Glottis _____

Liver _____

Small Intestine _____

Gall Bladder _____

Large intestine _____

Lungs _____

Stomach _____

Heart _____

Ears _____

Eggs (if female) _____

Mrs. Waeschle's Signature _____

Other tasks:

1. Describe the contents of your frog's stomach. Has he or she had anything to eat lately?
2. Do you have a He or a She? How do you know?
3. When you cut the ventral side of the frog, what hard, protective structure seemed to be missing in this amphibian?
4. Do some research on the web or in books around the room to list at least 10 things different species of frogs eat.

***** DON'T FORGET TO CLEAN UP! ALL PARTS MUST GO IN THE GARBAGE, NOT DOWN THE SINK. PLACE THE FROG INTO A BIOCONTAINMENT BAG.**

Comparative Anatomy – Frog vs. Human

Use your knowledge of frog and human anatomy, life cycles, reproduction, histology, and classification to list/describe at least 10 differences between frogs and humans.

Bullfrogs

Humans