

Name _____

Class _____

Date _____

Report Sheet for Lab Investigation 10: Frogs

Part A

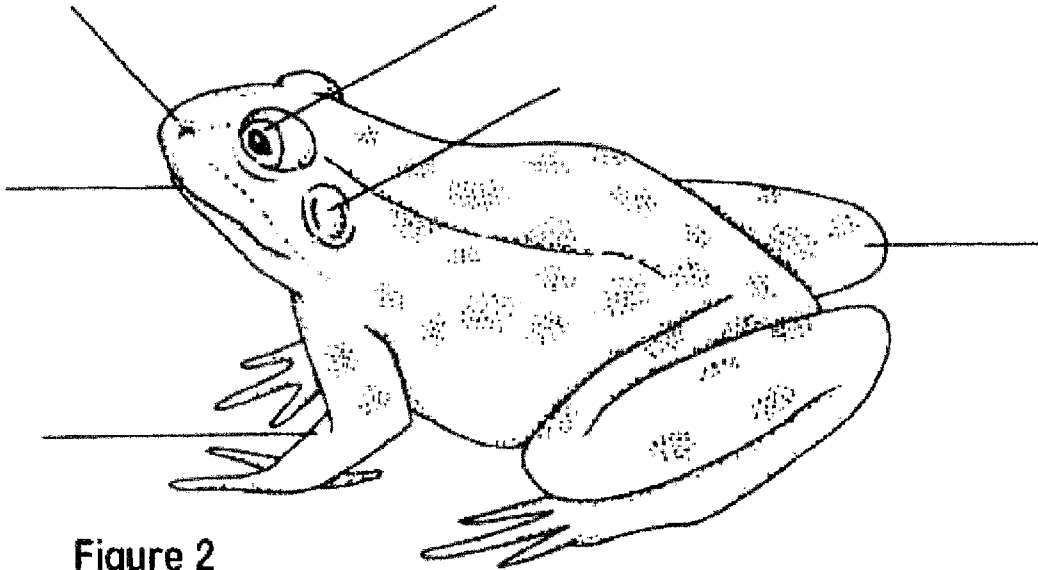


Figure 2

Check off these structures as you find them.

External Anatomy

- | | |
|---|--|
| <input type="checkbox"/> nostrils | <input type="checkbox"/> digit |
| <input type="checkbox"/> eyelid | <input type="checkbox"/> web |
| <input type="checkbox"/> pupil | <input type="checkbox"/> cloacal opening |
| <input type="checkbox"/> nictitating membrane | <input type="checkbox"/> tympanum |

Oral Cavity

- | | |
|---|--|
| <input type="checkbox"/> maxillary teeth | <input type="checkbox"/> gullet opening |
| <input type="checkbox"/> vomerine teeth | <input type="checkbox"/> vocal sac opening |
| <input type="checkbox"/> internal nostril opening | <input type="checkbox"/> glottis |
| <input type="checkbox"/> Eustachian tube opening | <input type="checkbox"/> tongue |

1. Describe the differences in the toes of the back legs and those of the front legs.

2. How long are the forelegs?

3. How long are the hind legs?

4. Do you think the difference in size has anything to do with the different ways the frog uses its legs?
Ø yes
Ø no
5. Describe the difference in coloration between the belly (ventral side) of the frog and the rest of its body.
-
-
-
6. Does a frog's skin have scales?
-
7. Describe the frog's skin
-
8. On the underside of the frog's skin are blood vessels. Why would the frog's skin need to have a rich supply of blood?
-
9. Is the tongue attached to the front or the back of the mouth?
-
10. How is the free end of the tongue shaped?
-
11. Normally when the frog is alive, a part of the tongue is sticky. Why is this characteristic important to the frog?
-
12. Why does the frog's mouth need to close tightly?
-
13. Run your finger along the upper jaw and feel the frog's tiny teeth. How does the frog use these teeth?
-
14. Where do the Eustachian tubes lead?
-
15. What is the function of the Eustachian tubes?
-

16. List several characteristics of a frog's external structures.

17. List characteristics of the frog's legs.

Forelimbs

Hindlimbs

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<hr/>	<hr/>
<hr/>	<hr/>

Part B

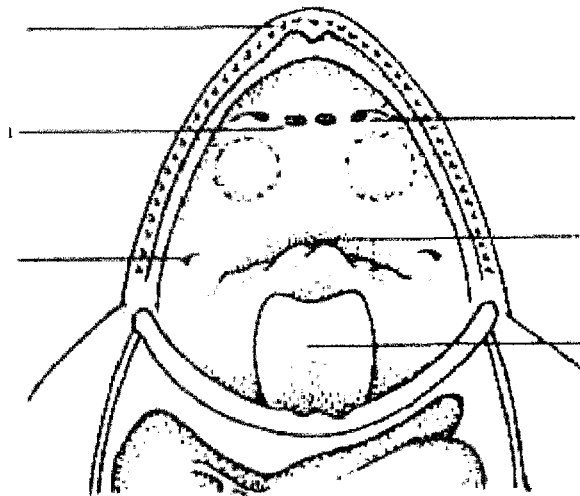


Figure 3

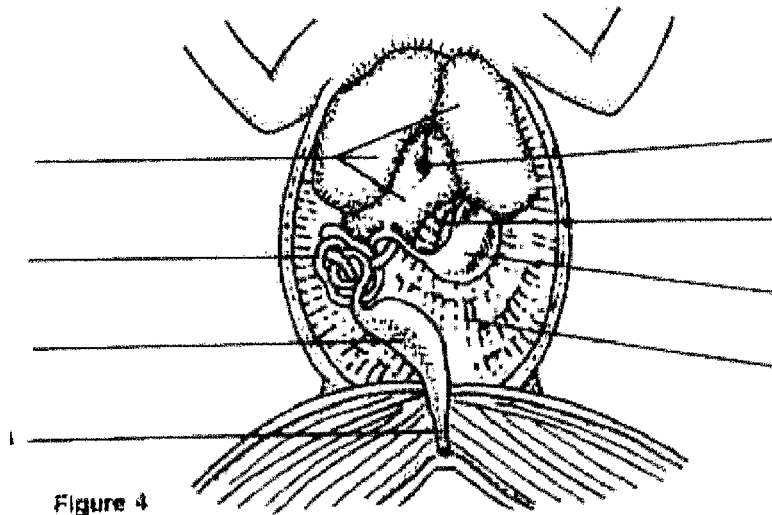


Figure 4

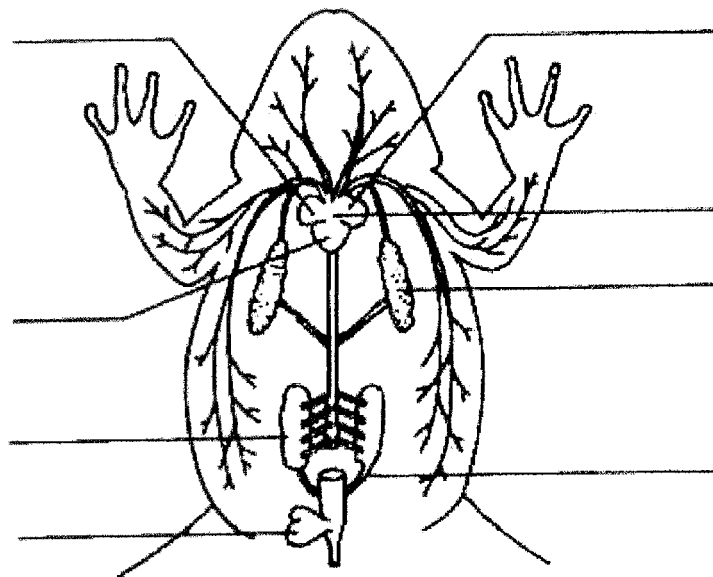


Figure 5

Check off these structures as you find them.

Internal Anatomy

- | | |
|--|--|
| <input type="checkbox"/> liver | <input type="checkbox"/> gall bladder |
| <input type="checkbox"/> pancreas | <input type="checkbox"/> stomach |
| <input type="checkbox"/> small intestine | <input type="checkbox"/> large intestine |
| <input type="checkbox"/> fat bodies | <input type="checkbox"/> heart |
| <input type="checkbox"/> lungs | <input type="checkbox"/> spleen |
| <input type="checkbox"/> kidneys | <input type="checkbox"/> urinary bladder |
| <input type="checkbox"/> mesentery | |

18. How many lobes does the liver have?

19. Where is the liver located in relation to the heart?

20. What color is the liver?

21. What does the liver produce?

22. What is the function of the gallbladder?

23. Describe what the heart looks like.

24. How many atria does the frog's heart have?

25. What is the function of an atrium?

26. How many ventricles does the frog's heart have?

27. What is the function of a ventricle?

28. Where are the lungs located in relation to the heart?

29. When the frog was alive, how did air enter its lungs?

30. What color is the stomach?

31. Does it feel hard or soft?

32. How does the stomach function in the frog's digestive system?

33. Is there any food in the stomach?

34. How do the muscular walls of the stomach help digestion?

35. Name the two sections of the small intestine.

36. How long was the small intestine of your frog?

37. What does the small intestine do to the food that the frog eats?

38. How long is the large intestine?

39. Give two differences (other than length) between the large and small intestine.

40. What does the pancreas produce?

41. How many kidneys does the frog have?

42. What do the kidneys do?

43. What does the urinary bladder store?

Analysis and Conclusion

44. How does the color of a frog help to protect it from predators?

45. Explain why in a frog's heart the ventricle has a thicker wall than the atrium.

46. How does the length of the small intestine relate to its function in absorbing digested food?

47. Which muscles in the frog seem to be the largest and strongest? Why do you think this is so?

48. The fat bodies you found are attached to the ovaries or testes of your frog. What role do you think the fat bodies play? Explain your answer.

Critical Thinking and Application

49. Frogs are insect eaters. Why is the frog's tongue better designed for the type of food it eats?

50. What adaptations permit the frog to live on land and in water?

51. The frog's sense organs are located on top of the head. How does this help the frog when it is in the water?

Going Further

Remove the skin from one of the frog's hind legs and examine the muscles. Use a probe to separate the thigh muscle. Notice that the muscle tapers at the end into a tough white cord, or tendon. A tendon attaches muscle to bone. Move the leg back and forth and observe how the muscles respond.

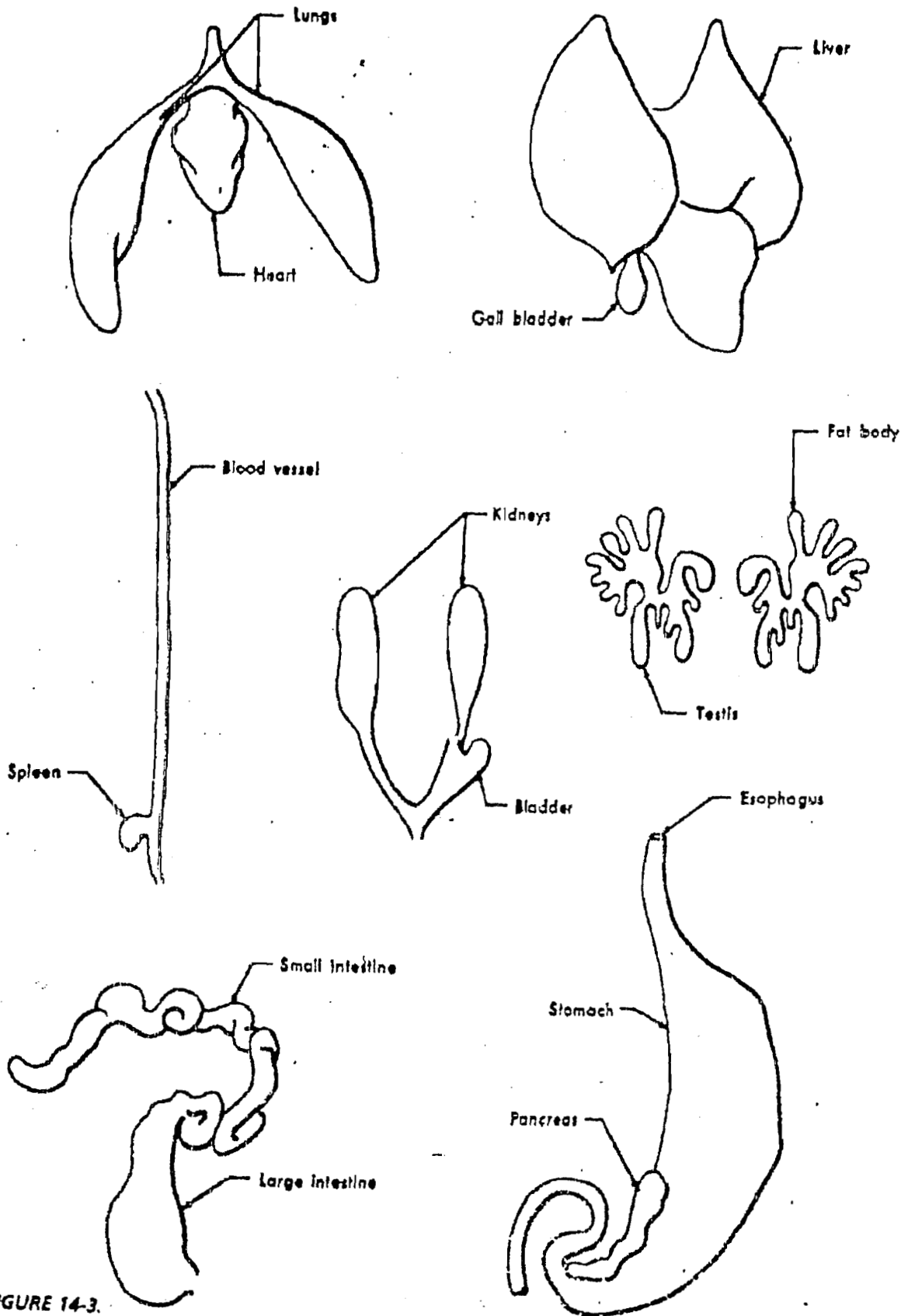


FIGURE 14-3.

Fill (put) these ORGANS in Figure 14-2 ON PAGE 10 AND label.

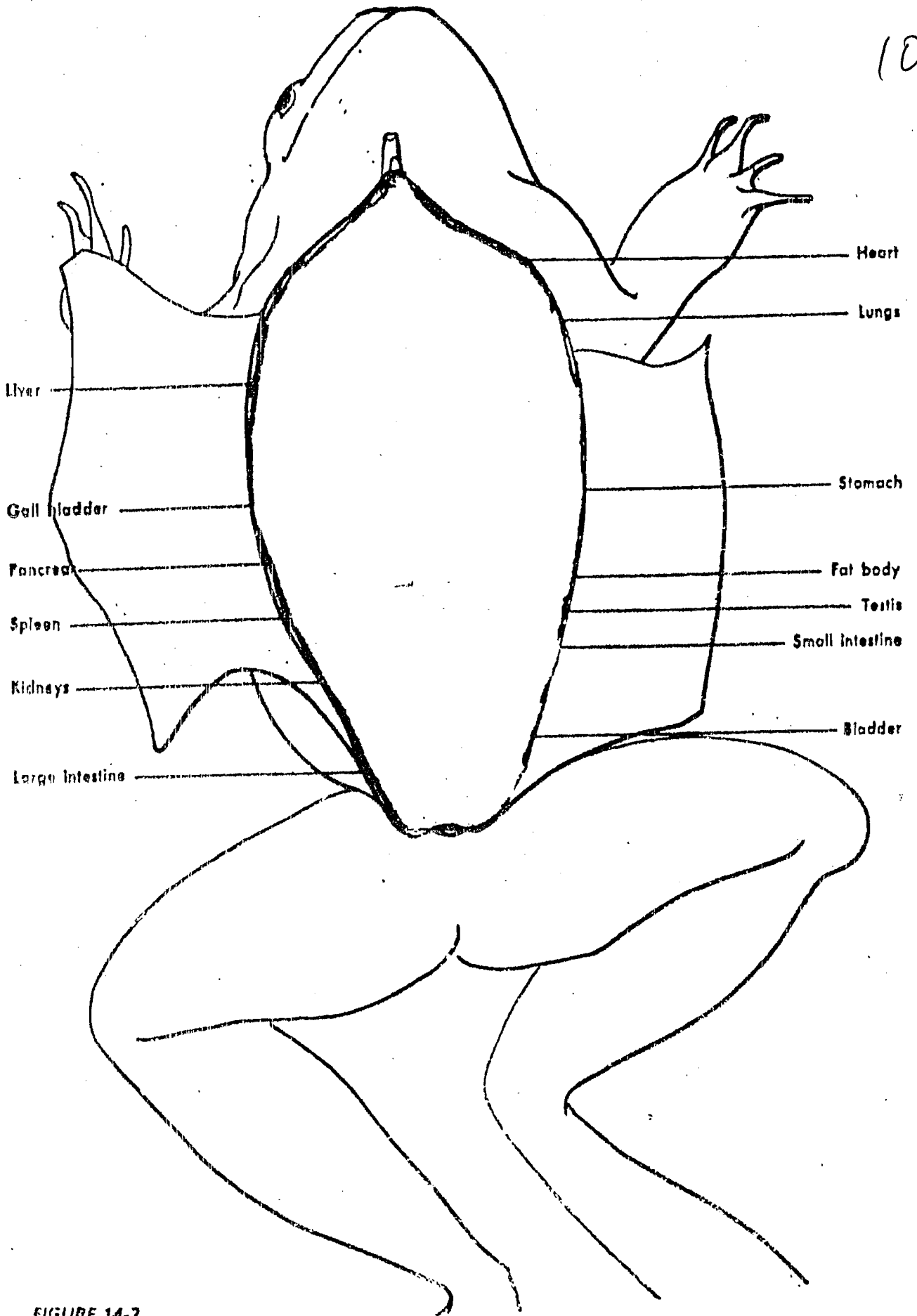


FIGURE 14-2.

Put in organs and label.