

# Pig Dissection

## Grading Rubric

Lab Components	Points Possible	Points Earned
1. Lab Practical – 15 questions on the anatomy of the pig	30	
2. Reflection Questions	70	
Total =	100	

**Reflection Questions:** *Hand write the answers to each of the questions on a separate sheet of paper.*

Respiratory System - \_\_\_\_\_ / 14 pts

1. What is the function of the respiratory system? (1pt)
2. List the functions of each of the following structures: nose, nasal conchae, sinuses, pharynx, larynx, epiglottis, trachea, bronchi, alveoli (6pts)
3. Why is it necessary for the trachea to have rings of cartilage in its walls? (1pt)
4. Why do the lungs have a large number of blood vessels? (1pt)
5. What are the 4 steps that happen for the lungs to expand, allowing you to inhale? (list volume and diaphragm change, pressure change, and then air movement) (2pts)
6. What are the 4 parts of respiration? (1pt)
7. What is the main part of the blood that carries oxygen? What is the main part of blood that carries carbon dioxide? (2pts)

Endocrine System - \_\_\_\_\_ / 9pts

8. What is the function of the endocrine system? (1pt)
9. What is the purpose of the hormone thyroxine? Which gland produces thyroxine? (2pts)
10. What is the purpose of the thymus gland? Where is the thymus gland located in humans? (2pts)
11. What are the two major functions of the pancreas (one function involves the release of which two hormones)? (1pt)
12. What are the functions of the adrenal medulla and the adrenal cortex? Where is the adrenal gland located? (3pts)

Cardiovascular System - \_\_\_\_\_ / 9pts

13. What is the function of the cardiovascular system? (1pt)
14. What is the purpose of the pericardium that surrounds the heart in mammals? What are the two layer of the pericardium called? (2pts)
15. Why do arteries have a thick ring of muscle in the tunica media? What type of muscle is found in arteries and veins? (2pts)
16. What are the blocked arteries in the heart called that are “bypassed” in humans by using veins from the patient’s legs? (1pt)
17. What are the two major veins of the human heart that return deoxygenated blood from the body? (1pt)
18. Why is pulmonary circulation bypassed in the unborn fetal pig? How is it bypassed (name of the structure can be found in the fetal anatomy chapter of the textbook)? (2pts)

Digestive System - \_\_\_\_\_ / 16pts

19. What is the function of the digestive system? (1pt)
20. List the functions of each of the following structures: mouth, tongue, salivary glands, pharynx, esophagus, stomach, liver, gallbladder, small intestines, large intestines (7pts)
21. Explain the 6 processes of digestion. (3pts)
22. What is peristalsis? (1pt)
23. What is the stomach muscle that controls the passage of food into the small intestines? (1pt)
24. What is the purpose of the rugae in the stomach? (1pt)
25. What is the purpose of the villi and microvilli of the small intestines? List the order of the 3 parts of the intestines from the stomach to the large intestine. (2pts)

Urinary System - \_\_\_\_\_ / 15pts

26. What is the main function of the urinary system? (1pt)
27. List the 4 main parts of the urinary system. (1pt)
28. Describe the location of the kidneys in the body. Which kidney is lower and why? (2pt)
29. If a mammal drinks large amounts of salt water, what will happen to the cells of the body and how will urinary output change? (1pt)
30. Explain the function of the nephrons in the kidneys. (1pt)
31. What are the 6 parts of the nephron. (3pts)
32. Explain the 4 steps of urine formation. (2pts)
33. As more solutes are filtered into the urine from the blood, what will happen to the movement of water? (1pt)
34. The kidneys help regulate pH of the blood. What other system helps with pH regulation? (1pt)
35. What is the purpose of aldosterone and antidiuretic hormones? (2pts)

Reproductive System - \_\_\_\_\_ / 7pts

36. What is the function of the reproductive system? (1pt)
37. What gender was your pig? What structures did you see to make that determination? (2pts)
38. What are the main gonads for males and females? (1pt)
39. Why is it important for the testes in mammals to completely descend into the scrotum? (1pt)
40. What are the differences between female egg production (oogenesis) and male sperm production (spermatogenesis) in terms of: *number of functioning sex cells at the end of meiosis, cells present at birth, when cells become active, and amount of DNA* (2pts)

# Autopsy Report

Group Members Names: \_\_\_\_\_

Dates: \_\_\_\_\_

Time: \_\_\_\_\_

## External Features

*Make a note of any deformities or any general observations and list the area on the pig that the deformity is located. Record the gender of your pig.*

Location	Observations
	Gender: _____

## Internal Anatomy

Organ	Weight (g)	Observations and Anatomic Structures
Thymus		
Thyroid		
Right Lung		
Left Lung		

Heart		
Gall Bladder		
Liver		
Spleen		
Stomach		
Small Intestines		
Pancreas		
Large Intestines		
Right Kidney		
Left Kidney		