

Bio 33 Lab 10 Lab Report

Lab Report

Part A: *Organization in Multicellular Organisms and Anatomical terms*

Match the following anatomical terms with their description. Place the letter associated with the term in the space provided.

Description	Term
1. ____ Farther from the trunk	a) Anterior
2. ____ Coming first or toward the front end	b) Distal
3. ____ Closer to the trunk	c) Dorsal
4. ____ Toward the back	d) Inferior
5. ____ Coming last or toward the hind end	e) Lateral
6. ____ Toward the midline or center of the body	f) Medial
7. ____ Toward the belly of underside	g) Posterior
8. ____ Toward the lower surface	h) Proximal
9. ____ Toward the sides; away from the midline	i) Superior
10. ____ Toward the upper surface	j) Ventral

11. List the levels of complexity found in multicellular organisms from the least complex to the most complex (HINT – start with cells).

12. Can an organ belong to more than one organ system?

Part B: External Anatomy

Use the images in on the slides in the lab manual to answer the questions in this section.

Part B: Image 1

13. In Part B: Image 1” what letter is associated with the **Genital papillae** _____
14. In Part B: Image 1” what letter is associated with the **Male urogenital opening** _____
15. In Part B: Image 1” what letter is associated with the **Mammary papillae** _____
16. In Part B: Image 1” what letter is associated with the **Scrotal sac** _____
17. In Part B: Image 1” what letter is associated with the **Umbilical arteries** _____
18. In Part B: Image 1” what letter is associated with the **Umbilical cord** _____
19. In Part B: Image 1” what letter is associated with the **Umbilical vein** _____

Part B: Image 2

20. In Part B: Image 2” what letter is associated with the **Ankle** _____
21. In Part B: Image 2” what letter is associated with the **Anus** _____
22. In Part B: Image 2” what letter is associated with the **Elbow** _____
23. In Part B: Image 2” what letter is associated with the **External ear** _____
24. In Part B: Image 2” what letter is associated with the **Eye** _____
25. In Part B: Image 2” what letter is associated with the **Knee** _____
26. In Part B: Image 2” what letter is associated with the **Mammary papillae** _____
27. In Part B: Image 2” what letter is associated with the **Nostril** _____
28. In Part B: Image 2” what letter is associated with the **Tongue** _____
29. In Part B: Image 2” what letter is associated with the **Umbilical cord** _____
30. In Part B: Image 2” what letter is associated with the **Wrist** _____

Part C: Internal Anatomy

Use the images in on the slides in the lab manual to answer the questions in this section.

Part C: Image 1

31. In “Part C: Image 1” what letter is associated with the **Epiglottis** _____
32. In “Part C: Image 1” what letter is associated with the **Hard palate** _____
33. In “Part C: Image 1” what letter is associated with the **Soft palate** _____
34. In “Part C: Image 1” what letter is associated with the **Trachea** _____

Part C: Image 2

35. In “Part C: Image 2” what letter is associated with the **Diaphragm** _____
36. In “Part C: Image 2” what letter is associated with the **Large Intestine** _____
37. In “Part C: Image 2” what letter is associated with the **Liver** _____
38. In “Part C: Image 2” what letter is associated with the **Gallbladder** _____
39. In “Part C: Image 2” what letter is associated with the **Small intestine** _____
40. In “Part C: Image 2” what letter is associated with the **Spleen** _____
41. In “Part C: Image 2” what letter is associated with the **Stomach** _____

Part D: Additional Questions

42. Below is a list of organs of the digestive system. Select the 8 organs that are part of the digestive tract.

Anus	Pancreas
Colon	Pharynx
Esophagus	Rectum
Gallbladder	Salivary Glands
Liver	Small intestine
Oral cavity	Stomach

43. Below is a list of organs of the digestive system. Select the 4 organs that are accessory organs.

Anus	Pancreas
Colon	Pharynx
Esophagus	Rectum
Gallbladder	Salivary Glands
Liver	Small intestine
Oral cavity	Stomach

Place the following organs of the digestive that food particles must pass through on their journey through the digestive tract in order. Write the first organ in the space provided for question 44 and continue from there. Use the Clickable image in the lab manual to help you.

Anus	Jejunum
Colon	Oral cavity
Duodenum	Pharynx
Esophagus	Rectum
Ileum	Stomach

44. The first organ food will pass through from the list _____.
45. The second organ food will pass through from the list _____.
46. The third organ food will pass through from the list _____.
47. The fourth organ food will pass through from the list _____.
48. The fifth organ food will pass through from the list _____.
49. The sixth organ food will pass through from the list _____.
50. The seventh organ food will pass through from the list _____.
51. The eighth organ food will pass through from the list _____.
52. The ninth organ food will pass through from the list _____.
53. The last organ food will pass through from the list _____.

54. What is the difference between an accessory organ of the digestive system and those of the digestive tract?

55. State one way in which the pig and human digestive system are similar.

56. State one way in which the pig and human digestive system are different.

Part E: *Nutrition and Food Label Analysis*

Use the food label provided in the lab manual to answer the following questions:

57. How large is a serving size for this product? _____

58. How many servings are in the container? _____

59. How much protein is contained in each serving of this product? _____

60. Does this product contain Vitamin D? _____

61. Does this product contain Iron? _____

62. Does this product contain calcium? _____

63. How much carbohydrate does this product contain? _____

64. What % Daily Value of Total fat per serving does this product contain? _____
65. If you are on a low cholesterol diet, should you eat this product? _____
66. Provide an explanation for your answer to question 65.
67. If you ate two servings of this product, how many calories would you consume? _____
68. If you ate three servings of this product, how many grams of sugar would you consume?

69. How many calories per gram of fat are in each serving of this product? _____
70. How many calories per gram of protein are in each serving of this product? _____
71. How many servings of this product would you have to eat in order to get 52 g of carbohydrate? _____
72. What % Daily Value of sodium per serving does this product provide? _____
73. If you ate 90 grams of this product, how many servings is that equivalent to? _____
74. If you are on a low sodium diet, should you eat this product? _____
75. Provide an explanation for your answer to question 74.

Part E: Homeostasis, Balance & Disease

- You will be assigned one of the following case studies based on the first letter of your last name.
- Use the information in the case study and in the table in the lab manual to diagnose the patient's disease or disorder.
- If the first letter of your last name starts with the letter A-E select case study 1.
- If the first letter of your last name starts with the letter F-J select case study 2.
- If the first letter of your last name starts with the letter K-O select case study 3.
- If the first letter of your last name starts with the letter P-U select case study 4.
- If the first letter of your last name starts with the letter V-Z select case study 5.

Case Study #1:

- A 60-year-old female has been very thirsty over the last two months. She has also been urinating more during the same period. In addition, she states that she has been eating more lately. A blood test reveals that her blood sugar level is high. What condition may be causing the woman to experience

these signs and symptoms?

Case Study #2:

- A 20-year-old male is brought to the emergency room of a hospital. He had been hiking with his friends in the mountains all day, where the temperature outdoors was 92°F. His body temperature in the emergency room was recorded as 101 °F. He seems confused and asks to drink a great deal of water. He has not urinated all day. What condition may be causing the young man to feel this way?

Case Study #3:

- A 60-year-old female goes to her doctor complaining of “puffiness”. Her ankles and face look swollen. Her blood pressure is low. She recently had a kidney infection. What condition may be causing the woman to feel this way?

Case Study #4:

- A 25-year-old female who is in her 7th month of pregnancy, goes to her doctor complaining of “wetting her pants”. What condition may be causing the woman to experience this condition?

Case Study #5:

- A 32-year-old male goes to the emergency room of a hospital complaining of headache, skin blisters, fever and chills. He states he as had sexual intercourse with 10 different individuals in the last two months. What may be causing all of this in this patient?

76. Which case study were you assigned based on the first letter of your last name?

77. What have disease or disorder have you diagnosed this patient with?