Virtual Pig Dissection ABSENT Assignment.

Name: Block: Date:

Go to this website: http://www.whitman.edu/biology/vpd/main.html You will be doing a pig dissection through the internet and answering questions as you go.

Begin by clicking on the link entitled: Anatomical References.

Regions of the Pig:

- 1. What are the five main regions on the pig?
- 2. What organs do you think the cranial region holds?
- 3. What organs does the pectoral region probably hold?
- 4. What organs does the pelvic region hold?
- 5. What organs does the caudal region hold?

Anterior/Posterior:

- 1. By looking at the picture anterior means what?
- 2. Posterior means what?
- 3. A transverse plane cuts the pig into what two pieces?
- 4. A saggital plane cuts the pig how?

Dorsal/Ventral:

- 1. Looking at the picture, Dorsal means what?
- 2. Looking at the picture, Ventral means what?
- 3. What is a frontal plane?
- 4. Is the belly considered dorsal or ventral?
- 5. Is the backbone or spinal chord considered dorsal or ventral?

Medial/Lateral:

- 1. The picture says that A is medial with respect to B, so what does medial mean?
- 2. What does lateral mean?

3. If you were asked to cut the pig down a midsaggital cut, where would you cut the pig?

Proximal/Distal:

- 1. What area is the point of reference?
- 2. What does proximal mean?
- 3. What does distal mean?
- 4. Is point A proximal or distal compared to point B?
- 5. Is point B proximal or distal compared to point A?

Close this web browser and return to the starting point. Then click on the next subject: Sexing your pig.

Is it a male?

- 1. Is this pig laying ventral side or dorsal side up?
- 2. Do male pigs have mammary glands or nipples?
- 3. Towards the caudal region (anus) the male pig is lacking a
- 4. What are the swelling areas on a male pig ventral to the anus?
- 5. What do these contain?
- 6. Where is the urogenital opening on a male pig?

Is it a female?

- 1. What organ does the female pig have beneath their tail?
- 2. In a female what two things exit from the anal region?
- 3. Where is the urogenital opening on a female?

Close out this section and click on the Circulatory system.

- 1. What are two functions of the circulatory system?
- 2. Draw or explain the incisions lines in order to see the circulatory system.
- 3. Draw a picture of the heart, lungs and thymus gland.

- 4. What is the artery that can be seen on the heart that separates the right and left side?
- 5. How many chambers does a pig heart have?
- 6. Is a beef heart or a human heart similar to a pig heart?
- 7. Describe the flow of blood through the heart.
- 8. The chordae Tendinae helps to make up the heart valves, describe or draw what they look like.

Close out that section and click on the Respiratory system:

- 1. What is the passageway air travels as it enters through the nares?
- 2. To the left of the trached or behind it is what other tube?
- 3. Which tube lets food down and which tube lets air down?
- 4. What is the name of the membrane that the lungs are in?
- 5. Describe what the lungs look like? (Color, shape, texture, etc.)
- 6. The trachea splits into what when it hits the lungs?
- 7. Describe where the diaphragm is located.
- 8. How does the diaphragm aid in breathing?
- 9. Draw a picture of how the lungs and heart with the trachea all sit together.

EXTRA CREDIT!!

Close out this section and click on the Nervous System. Once inside, begin by clicking on the cranial section of the pig.

- 1. Draw or describe how you would have cut the skull in order to see/expose the brain.
- 2. What is the membrane that covers the brain called?
- 3. Describe the brain: colors, lines, textures, size, etc.
- 4. What are the four lobes of the brain?
- 5. What is the main difference between the pig brain and the human brain?
- 6. Why does a pig also have two large olafactory lobes?
- 7. If you wanted to look at each hemisphere of the brain what would you do to see them?

Now click on the start over button to go to the cervical section.

- 1. Do pigs have a muscular neck?
- 2. Why is this important for them?
- 3. What has to be removed in order to actually see the spinal chord?
- 4. The bones that protect the spinal chord are called what?
- 5. Where do the nerves extend from?
- 6. Once you have removed the vertebrae, what does the actual spinal chord look like?
- 7. Draw a picture of the spinal chord with the vertebrae and draw another picture of what it looks like when that has been removed.

8. Last draw a picture of the spinal chord with the nerves attached.

9. Where do these nerves go to?

You are finished with this section. Now you must take the quizzes for each section besides the reproductive section. Good luck! Please write down your answers as there is no way to print them off.

You will hand this sheet in, your answers to your quizzes as well as your written lab write up. (DUE MONDAY).