Complete the following study guides using the virtual pig dissection on the [Whitman College](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/nervous-system/lumbar-region) website. In order to access the proper information to answer each questions click the links in the document when you access it on your iPad. ***All answers must be written in complete sentences to receive full credit.***

**Digestive System Study Guide:**

\*Click [*The Head*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-head/rostral-oral-cavity)\*

1. What are the paired nares?

2. What is the function of the sensory papillae?

\*Click [*Inside the Oral Cavity*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-head/inside-the-oral-cavity) \*

3. What is the difference between the hard and soft palate?

4. Where is the epiglottis located?

\*Click [*Through the Peritoneal Membrane*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-abdominal-cavity/abdomen/through-the-peritoneal-membrane)

5. Which organs are highlighted on the picture once the cut is made through the peritoneal membrane?

\*Click [*Gallbladder*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-abdominal-cavity/abdomen/gall-bladder)

6. What’s visible underneath the liver?

7. What is the location and function of the gall bladder?

\* Click [*Inside the Abdomen*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-abdominal-cavity/abdomen/inside-the-abdomen)

8. What occurs in the small intestine?

\*Click [*Stomach and Spleen*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-abdominal-cavity/abdomen/stomach-and-spleen)

9. What is the function of the pyloric sphincter?

10. Which organ filters out and destroys dead blood cells?

\*Click [*Rectum and Pancreas*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-abdominal-cavity/abdomen/rectum-pancreas)

11. What is the function of the umbilical arteries?

12. Why is the pancreas important?

13. What is the last part of the large intestine that stores solid waste?

\*Click [*Mesentery*](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/digestive-system/the-abdominal-cavity/abdomen/mesentery)

14. Why is the mesentery a purplish color?

**Excretory System Study Guide**

\* Click [Kidney](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/excretory-system/kidneys)

1. What are the kidneys responsible for?

2. What else do the kidneys do?

\* Click [Renal Blood Vessels](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/excretory-system/renal-blood-vessels)

3. Which blood vessel carries unfiltered blood to the kidneys?

\* Click [Ureters](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/excretory-system/ureters)

4. What is the function of the ureters?

\*Click [Storage](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/excretory-system/bladder)

5. Where is the urine stored?

6. How does urine exit the bladder?

**Respiratory System Study Guide:**

\*Click [Pathway](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/respiratory-system/diaphragm)

1. Trace the pathway by listing the structures air takes going into the pig’s body.

\*Click [Diaphragm](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/respiratory-system/diaphragm)

2. How does the diaphragm function to bring air into the lungs?

**Circulatory System Study Guide:**

\*Click [Circulatory System](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/circulatory-system)

1. What is the circulatory system responsible for?

\*Click [Thoracic Cavity](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/circulatory-system/thoracic-cavity)

2. What does the thymus gland do? What happens to it later in life?

\*Click [Heart and Lungs](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/circulatory-system/heart-and-lungs)

3. What causes heart attacks?

\*Click [Aorta](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/circulatory-system/aorta)

4. Which chamber of the heart pumps blood into the aorta?

\*Click [Pathway](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/circulatory-system/cow-heart-cross-section) \*

5. Trace the pathway blood takes from the body through the heart and back to the body.

**Reproductive System Study Guide:**

*Female*

\*Click [Ovary](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/reproductive-system/female/ovary)

1. What are the functions of the ovaries?

\*Click [Uterus](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/reproductive-system/female/uterus)

2. What happens to fertilized eggs inside of the uterus?

*Male*

\*Click [Testis](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/reproductive-system/male/testis)

3. What are the functions of the testicles?

4. What is the pathway of sperm starting at the testes?

**Nervous System**

\*Click [Cranial region](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/nervous-system/cranial-region)

1. What is the function of the thalamus?

\*Click [Cervical region](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/nervous-system/cervical-region)

2. What is the function of the spinal cord?

\*Click [Lumbar](https://www.whitman.edu/academics/departments-and-programs/biology/virtual-pig/nervous-system/lumbar-region)

3. What makes up spinal nerves? What is their function?

4. What is the function of the cranial nerves? How many are there?