Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Agriscience**

**Animal Systems Study Guide**

Part 1: Match each body system with the definition

|  |  |  |
| --- | --- | --- |
|  | 1. Musculoskeletal

(our text lists muscular and skeletal systems separately, but they work together to accomplish the same task) | A. Removal of toxic wastes from the body and maintains body’s water and electrolyte balance. |
|  | 2. Cardiovascular | B. Provides oxygen and removes carbon dioxide. |
|  | 3. Respiratory | C. The covering of the body by skin and its associated structures. |
|  | 4. Nervous | D. Continuous circulation of blood. |
|  | 5. Digestion | E. Provides chemical control over many body functions. |
|  | 6. Urinary  | F. Structure, protection and movement. |
|  | 7. Reproductive | G. Provides intake of nutrients for the body. |
|  | 8. Endocrine | H. Controls other organ systems. |
|  | 9. Integumentary | I. Provides the means for animals to propagate their species. |

Terms & Concepts to Know:

* **Digestive System**
	+ What is the difference between an animal with a monogastric digestive system and a ruminant digestive system?
	+ Give an example of an animal with a monogastric digestive system and a ruminant digestive system.
	+ List the 4 chambers of the ruminant digestive system in order of how food travels through the body.
	+ Which chamber in a ruminant is known as the “true stomach”?
	+ What advantages do ruminant animals have over a monogastric animal?
	+ What is the purpose of the gizzard, crop, and proventriculus in poultry?
* **Circulatory System**
	+ What is the main function of red blood cells? White blood cells? Platelets? Plasma?
	+ List two functions of blood
	+ What is the function of the valves of the heart?
	+ # of chambers inside a mammals’ heart?
	+ Pulmonary System- What does it deliver & where does it deliver to?
	+ Systemic System- What does it deliver & where does it deliver to?
	+ Arteries or Veins- which is responsible for blood pressure?
	+ Arteries or Veins- which carries blood to the heart?
	+ Arteries or Veins- which have thicker walls?
	+ What causes a heart murmur?
	+ List two or three results of heart failure, besides death?
	+ What options are there to treat heart failure?
* **Nervous System**
	+ What controls the nervous system?
	+ What do nerves do?
	+ What is the main function of a neuron?
	+ What is the largest section of the brain, and what is it responsible for doing?
	+ List three involuntary reactions of the human body.
* **Endocrine System**
	+ The endocrine system is composed of glands that secrete what substance?
	+ What are two functions of hormones?
	+ What is the function of:
		- Pituitary gland?
		- Hypothalamus?
		- Adrenal gland?
		- Thyroid?
* **Skeletal System**
	+ What is cartilage?
	+ What is the purpose of the skeletal system?
	+ Bones are covered in periosteum. What purpose does that serve?
	+ What are the 4 categories of bones?
	+ Joints- What is the purpose of joints in the body system?
	+ What is synovial fluid?
* **Muscular System**
	+ What is the purpose of the skeletal system?
	+ Why do animal producers (say beef cattle farmers) emphasize a healthy muscular system in their animals?
	+ What are the three categories of muscles in the body? (pg. 250)
	+ Explain the process of how muscles operate and work.
	+ What are tendons?
	+ Why did the chicken dissected in class have “dark meat” and “white meat” tissue?
	+ Where do we find smooth muscle in the body system>
	+ Where is cardiac muscle found in the body?