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?