

## **Animal Anatomy and Physiology Review**

### ***Digestive System:***

- 1) Define: Digestion, Ingestion, Absorption, Elimination
- 2) List all sections of the GI Tract. List all accessory organs.
- 3) List the chemical and physical digestion that happens in the mouth.
- 4) What enzyme is present on the mouth and what does it break down?
- 5) What is the function of the epiglottis?
- 6) What is the function of the esophagus? How is the esophagus different from the trachea?
- 7) List the chemical and physical digestion that happens in the stomach. What gets broken down here?
- 8) What is the purpose of stomach acid?
- 9) What is the term used for digested food leaving the stomach?
- 10) What chemical and physical digestion happens in the small intestine?
- 11) What gets broken down here? Absorbed?
- 12) What are villi and why are they present in the small intestine?
- 13) Name one of the enzymes responsible for digestion and name what it breaks down.
- 14) List the three sections of the small intestine. Where does most of the absorption happen?
- 15) What is the function of the gallbladder?
- 16) What is the function of the liver?
- 17) What is the function of the pancreas?
- 18) What happens in the large intestine?
- 19) What is peristalsis and where does it happen?
- 20) What three categories do we use to classify digestive disorders?
- 21) Name one digestive disorder and describe in detail what causes it.

### ***Excretory System***

- 1) The excretory system deals with waste caused by the breakdown of what?
- 2) We excrete amino acids in the form of \_\_\_\_\_ (hint: starts with a u).
- 3) Urine formation depends on what four processes. In your own words briefly describe what happens in each of these processes.
- 4) Urine is created in what organ?
- 5) Urine is stored in what organ?

### ***Circulatory System***

- 1) Put the following blood vessels in order as they flow OUT of the heart, around your body, and back TO your heart
- 2) Which is thicker, arteries or veins? Why?
- 3) Which have valves, arteries or veins? Why?
- 4) Why are capillaries so thin?
- 5) What causes fluid to leave the blood vessel?

- 6) What is the name of the system that runs parallel to the circulatory system and drains interstitial fluid?
- 7) List the four components of blood and briefly describe what each of them does.
- 8) What is another name for the pacemaker of the heart?
- 9) What causes the 'lub-dub' sound of the heart?
- 10) What is the difference between systole and diastole?
- 11) Describe the difference between an open and a closed circulatory system. Which ones do humans have?
- 12) What is the difference between atria and ventricles?
- 13) What valve separates the atria from the ventricles?
- 14) What valve separates the ventricles from the arteries?
- 15) Name the four chambers of the heart.
- 16) What is the function of the pulmonary circuit?
- 17) What is the function of the cardiac circuit?
- 18) Briefly describe TWO of the following: Cardiac Catheterization, Angioplasty, Coronary Bypass Surgery.
- 19) What are the four categories of heart disease?
- 20) What is an arrhythmia and how does a pacemaker help solve it?
- 21) What causes atherosclerosis?
- 22) Myocardial infarction is another word for what?

### ***Respiratory System***

- 1) What does our body use oxygen to create?
- 2) Define: ventilation, diffusion, perfusion.
- 3) List the structures of the respiratory tract in order.
- 4) What happens to air in the nose/mouth.
- 5) Describe the structure of the trachea. How does this help its function.
- 6) What two things line the trachea? What do they do?
- 7) What is the difference between bronchi and bronchioles?
- 8) What are alveoli and why are they only one cell thick?
- 9) What happens at the alveoli?
- 10) What are the alveoli lined with?
- 11) What happens to the ribs when you breathe in? Out?
- 12) What happens to the diaphragm when you breathe in? Out?
- 13) How do the intercostal muscles help breathing?
- 14) Name one respiratory disorder and describe how it is caused.
- 15) What gas does your brain use to monitor breathing levels?



