MCAS Review – Anatomy & Physiology

Directions: Use your Big Picture Review Sheet to answer the following questions in complete sentences.

1. Explain the difference between anatomy and physiology.

2. Fill in the following: Cells $\rightarrow$ ___________ $\rightarrow$ Organs $\rightarrow$ ______________________ $\rightarrow$ Organism

3. Name the 4 tissue types. Describe the structure and function of each.

4. What is meant by homeostasis? Reflect on the following statement, “Communication between cells is required for coordination of body functions.”

5. What is a physiological feedback loop? Describe an example.

6. What are the 2 main types of bone tissue? What is the function of each?

7. What are the functions of bone?
8. What is **cartilage**? Where is it found?

9. What is the function of a **ligament**? a **tendon**?

10. What are the 3 types of muscle? Discuss the location and function of each.

11. Explain how bones work with the muscles to make you move?

12. What is the job of the nervous system? Name its 2 basic divisions and the function of each.

13. What is the primary cell of the nervous system? Sketch and label a cell below. Then draw an arrow to represent the direction of impulse. What is an **impulse**?

14. Compare and contrast **sensory neurons** and **motor neurons**.
15. What are the major parts of the **circulatory system**?

16. Describe the structure of the **heart**. What is its job?

17. Compare and contrast the 3 main types of **blood vessels**.

18. What is the job of the **liver**? the **kidney**?

19. What are the major parts of the **respiratory system**? Discuss the function of each.

20. Discuss the structure of the **bronchial tree** and reflect on how it is perfectly designed for its function.

21. Complete the following: **Gas exchange** occurs between the ____________ and the ____________.
22. What are the major parts of the digestive system? Discuss the job of each part.

23. Discuss how the stomach and small intestine are beautifully designed for their functions.