**Body System Analogies**

**Part 1: Hierarchy of Parts:**

**Hierarchy:** an ordered group of related things from lowest to highest.

**Directions:** Please read the following paragraph and answer the questions that follow.

The organization of our world is mind-blowing if we consider how much easier it is to have a disorganized room than to have a clean room! Likewise, the organization of the human body is equally incredible!! How do we stay together? Each human body is made up of over 100 trillion **cells** that have different **structures** and different **functions**. **Cells** that work together make up **tissues**.

There are four main types of **tissues**: muscle tissue (these make up our muscles!), nervous tissue (these make up our brain and spinal cord), connective tissue (these hold everything together and include blood and bone!), and epithelium tissue (these tissues protect, including our skin). At least two **tissues** working together combine forces to make up **organs** (some examples include our heart, lungs, and brain).

Lastly, **organs** combine forces to make up **organ systems** (some examples include our respiratory system (breathing) and the circulatory system (heart pumping)). When we have all our organ systems working together, we have a human body!

Post Reading Questions:

1. What do the muscle tissues make up? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What do the nervous tissues make up? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Why is connective tissue important? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Why is epithelium tissue and important and what is an example? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the main function of the respiratory system? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What is the main function of the circulatory system? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 2: Analogies**

**Analogy:** a literary function that draws a comparison in order to show similarity.

**Directions:** In the human body’s hierarchy of parts, cells are the lowest and the human body (organism) is the highest. In order to better understand the human body’s hierarchy of parts, Ms. Mettler has made some analogies for you to do. Please write *cell, tissue, organ, organ system, or body* next to the appropriate part.

**CITY: WORLD:**

**\_\_\_\_\_\_\_\_: Charlotte \_\_\_\_\_\_\_\_: state**

**\_\_\_\_\_\_\_\_: district \_\_\_\_\_\_\_\_: continent**

**\_\_\_\_\_\_\_\_: family \_\_\_\_\_\_\_\_: globe**

**\_\_\_\_\_\_\_\_: citizen \_\_\_\_\_\_\_\_: city**

**\_\_\_\_\_\_\_\_: neighborhood \_\_\_\_\_\_\_\_: country**

**SCHOOL DISTRICTS:**

**\_\_\_\_\_\_\_\_: grade**

**\_\_\_\_\_\_\_\_: team**

**\_\_\_\_\_\_\_\_: student**

**\_\_\_\_\_\_\_\_: all Charlotte public schools**

**\_\_\_\_\_\_\_\_: James Martin Middle School**

**CAROLINA PANTHERS:**

**\_\_\_\_\_\_\_\_: the Panthers team**

**\_\_\_\_\_\_\_\_: NFC South**

**\_\_\_\_\_\_\_\_: offensive line**

**\_\_\_\_\_\_\_\_: National Football League**

**\_\_\_\_\_\_\_\_: Cam Newton**