**HUMAN BODY SYSTEMS PROJECT – Science**

**Objective:** Your objective is to prepare a PowerPoint presentation AND a poster OR 3-D model to educate your classmates about one of the body systems that makes up the human body. **I will assign you a body system.** If you forget your body system, look in the project description on StudentVue. You will be assigned one of the following body systems to research: Circulatory System, Digestive System, Excretory System, Muscular System, Nervous System, Respiratory System, Skeletal System, Endocrine System, or Reproductive System.

**Part A:**

**Students will create a PowerPoint that covers the organs in one system of the body.**

• Each slide in the PowerPoint will highlight one organ and its purpose and functions and

identify cells and tissues within at least one organ in the system.

• The slides will be organized in steps to show how the whole system works together.

• Students will plan, create and present ppt presentation on the human body system to class

**Part B (Option 1):**

**Students will create an outline poster of a human body and include all the organs within one**

**system of the body.**

• Students will illustrate each body system and organs.

• Students will include the purpose and functions of each organ in the body system and

identify cells and tissues within at least one organ in the system.

• Students will plan, create, and present outline poster on the human body system to class.

**Part B (Option 2):**

**Students will create a 3-D model of the human body outline and the organs within one system of**

**the body.**

• Each organ will be labeled and include an explanation of its function.

• A list of cell types and tissues within one organ of the system will be identified.

• Students will plan, create, and present 3-D Model on the human body system to class

**Follow the Rubric Checklist Below to Help You Earn an A+ on your Project!**

**Part A: PowerPoint Presentation - Worth 50 points**

* Title Slide that includes Your Name, Class Period, and System (2 points)
* 8 Slides (3 points) that Contain:
* At least 8 graphics (5 points)
* You need to list and explain the functions of the organ system (5 points)
* Identifies the major organs and their functions (10 points)
* Describe the basic structure of at least one major organ in the body system (10 points)
* Describe how the system is linked to at least 2 other systems in the body (5 points)
* Describe a disease associated with their body system (5 points)
* 5 fun facts about your system (5 points)

**Part B: Poster OR Model - Worth 50 points**

* Title and Name (2.5 points)
* Outline of body (2.5 points)
* Diagram of major organs in anatomically correct locations (20 points)
* Identify and Label major organs (10 points)
* Neat, easy to understand, colorful and creative (15 points)

**Body Systems Checklist**

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| Circulatory System:  -Description/major functions of circulatory system.  -Diagram that includes the major parts (heart, artery, vein, capillary) & the function(s) of each. -Describe each of the components of red blood cells, white blood cells, platelets, & plasma  -Describe the path blood travels through your body. -Explain how this body system works with other systems in the body. Use 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system | Digestive System:  -Description/major functions of digestive system  -Diagram that includes the major parts (mouth, esophagus, stomach, small intestine, liver, pancreas, and large intestine) and the function(s) of each.  -Describe the path food travels throughout the digestive system.  -Explain how this body system works with other systems in the body. Use 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associate with this body system | Excretory System:  -Description/major functions of excretory system  -Diagram that includes the major parts (lungs, kidneys, urinary bladder, ureter, urethra, liver, and skin) and the function(s) of each.  -Explain how this body system works with other systems in the body. You will need at  least 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system. |
| Muscular System:  -Description/major functions of muscular system  -Describe the function and locations of each type of muscle (skeletal muscle, smooth muscle, and cardiac muscle)  -Diagram that includes the major muscles in the body (biceps, oblique abdominis, sartorius, deltoid, orbicularis oculi, sternomastoid, gastrocnemius, pectoral, temporalis, gluteus maximus, quadriceps, tibialis, masseter, rectus abdominis, and triceps) and list the function(s) of each.  -Describe how muscles work in pairs to make parts of the body move using the biceps and triceps as an example.  -Explain how this body system works with other systems in the body. You will need at least 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system. | Nervous System:  -Description/major functions of the central nervous system and peripheral nervous system.  -Diagram that includes the major parts (brain, spinal cord, nerves, and neurons) and the function(s) of each.  -Describe the path a nerve impulse travels throughout your body from stimulus to response.  -Explain how this body system works with other systems in the body. You will need at least 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system. | Respiratory System:  -Description/major functions of respiratory system  -Diagram that includes the major parts (trachea, lungs, diaphragm, epiglottis, larynx, vocal cords) and the function(s) of each.  -Describe the “breathing” process.  -Explain how this body system works with other systems in the body. You will need at least 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system. |
| Skeletal System:  -Description/major functions of skeletal system  -Diagram that includes the major parts (bones, ligaments, tendon, cranium, clavicle, humerus, scapula, sternum, rib, vertebra, ulna, radius, carpals, metacarpals, phalanges, pelvis, femur, patella, tibia, fibula, tarsals, and metatarsals) and the function(s) of each.  -Describe each of the following joints and where they are located: hinge, pivot, and ball and socket.  -Explain how this body system works with other systems in the body. You will need at  least 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system. | Endocrine System:  -Description/major functions of endocrine system  -Diagram that includes the major parts (hypothalamus, pituitary, thyroid, parathyroid. Adrenals, pineal body, ovaries, and the testes.) and function(s) of each.  -Describe each of the following and where they are located: kidney, liver, heart and gonads  -Explain how this body system works with other systems in the body. You will need at  least 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system. | Reproductive System:  -Description/major functions of reproductive system  -Diagram that includes the major parts (ovaries, fallopian tubes, uterus, vagina, vulva, mammary glands and breasts, penis, the scrotum, and the testicles) and list the function(s) of each.  -Explain how this body system works with other systems in the body. You will need at  least 2 examples.  -Find 5 fun facts about this body system.  -Describe 2 diseases associated with this body system. |