

Name: _____ Class: _____ Date: _____

Systems of the Human Body Project

You will read and research to become an expert on one of the systems of the human body. Then you will produce a product (PowerPoint presentation, poster, board game, children's book, comic book or a collection of poems) that can be used to teach another person about this body system. The product you choose to complete must satisfy the following requirements:

- Completely trace the pathways through out the body system being studied. Discuss the organs included in the system and their functions.
- Includes information on one key disease or disorder that affects this body system, how it is diagnosed and treated. Can people do anything to prevent the disease or disorder? (Some examples may include: asthma, heart attack, stroke, ulcers, etc.)
- A separate document not to exceed 2 pages that is a reflection on why you chose the type of product you did and why you think it is an effective format for instructing others. Include what you learned that you didn't know before this project, and what you might want to research further.
- In a separate document list all resources used to carry out this project in MLA format. As always Wikipedia is not an acceptable source.

Body systems:

- **Respiratory system**
 - Identify the structures and functions of the respiratory system.
 - Describe what happens between the alveoli and the capillaries.
 - Trace the flow of oxygenated and deoxygenated air through the system.
 - Discuss one disease or disorder of the respiratory system.
- **Circulatory system**
 - Identify the structures and functions of the circulatory system.
 - Include a diagram labeling the parts of the heart and trace the flow of blood through the heart from the right atrium to the aorta.
 - Describe the components of blood and their functions: red blood cells, white blood cells, platelets and plasma.
 - Discuss one disease or disorder of the circulatory system.
- **Nervous system**
 - Identify the structures and function of the nervous system.
 - Describe the structure of a neuron and explain how it operates (Diagram)
 - Describe the difference between the parts and functions of the Central Nervous System (CNS) and the Peripheral Nervous System (PNS).
 - Discuss one disease or disorder of the nervous system.
- **Digestive system**
 - Identify the structures and functions of the digestive system.
 - Explain the function of the digestive enzymes lipase, amylase, and protease.
 - Discuss the importance of the liver and pancreas in digestion.
 - Discuss one disease or disorder of the digestive system.

- **Skeletal system**
 - Identify the structures and functions of the skeletal system. (including ligaments)
 - Identify 10 major bones in the body and their importance to the body.
 - Explain the differences in structure and function between the four kinds of moveable joints: ball and socket, hinge, pivot, and gliding.
 - Discuss one injury or disorder of the skeletal system.
- **Muscular system**
 - Compare the structure and function of the three types of muscle tissue and give examples of where each of these would be found in the body.
 - Explain how muscles, bones, and tendons are related.
 - Identify five major muscles of the body and their function.
 - Discuss one injury or disorder of the muscular system.
- **Excretory system**
 - Identify the structures and functions of the excretory system (including the skin, kidneys, lungs and liver and how each is involved in excretion).
 - Describe the structure and function of the kidney and its parts.
 - Diagram of the urinary system as part of the excretory system, and explain its function.
 - Discuss one disease or disorder of the excretory system.
- **Immune system**
 - Identify the structures and functions of the immune system.
 - Explain how the skin functions as a defense against disease.
 - Distinguish between a specific and nonspecific response.
 - Discuss one disease or disorder of the immune system.
- **Endocrine system**
 - Identify the structures and functions of the endocrine system.
 - Explain how this system regulates the body and its growth.
 - Identify five different hormones and their functions within the body.
 - Discuss one disease or disorder of the immune system.