

Human Body System Research & Diagram

Due Wed/Thurs

Objective: Create a diagram that reflects your research of the human body system assigned to you.

Possible Human Body Systems: integumentary (Chapter 34), muscular (Chapter 34), skeletal (Chapter 34), digestive (Chapter 35), endocrine, (Chapter 35), nervous (Chapter 36), respiratory (Chapter 37), circulatory (Chapter 37)

Requirements on front (10 points)- Diagram

- Outline of a human body
- All major organs/structures are drawn and labeled in appropriate location (specifics found below)
- Colored or thoughtfully shaded

Requirements on back (10 points)- Research

- At least 2 major functions of your system
- List all major organs/structures
- Brief description of each listed part's function
- At least 3 fun facts/ interesting information
- Answers to the specific questions below (depends on what system you are assigned)

Muscular

- Diagram should include the following labeled muscles: biceps, oblique abdominis, deltoid, pectoral, quadriceps, and triceps
- Describe how muscles work in pairs to make the body move (Example: biceps and triceps)
- Describe the function and locations of each type of muscle- skeletal, smooth, cardiac

Skeletal

- Diagram should include the following labeled bones: cranium, clavicle, humerus, scapula, sternum, rib, vertebra, ulna, radius, carpals, metacarpals, phalanges, pelvis, femur, patella, tibia, fibula, tarsals, and metatarsals.
- Describe each of the following joints and give an example of each: hinge, pivot, ball-and-socket
- Compare and contrast ligaments and tendons

Digestive

- Diagram should include the following labeled parts: mouth, esophagus, stomach, small intestine, liver, pancreas, gallbladder, and large intestine
- What is the difference between chemical and mechanical digestion?
- Describe the pathway of food (starting at the mouth)

Endocrine

- Diagram should include the following labeled parts: hypothalamus, pituitary gland, thymus, thyroid, parathyroid, adrenals, pancreas, ovaries, and testes
- List 3 examples of hormones and their functions.
- Describe one example of a disease that affects the endocrine system.

Nervous

- Diagram should include the following labeled parts: brain, spinal cord, nerves, and neurons
- Summarize the different parts of a neuron.
- Describe the path a nerve impulse travels throughout the body from stimulus to response

Respiratory

- Diagram should include the following labeled parts: trachea, lungs, diaphragm, epiglottis, larynx, vocal cords
- Describe how oxygen is exchanged for carbon dioxide during breathing
- Describe one example of a disease that affects the respiratory system

Circulatory

- Diagram should include the following labeled parts: heart, major veins and arteries, capillaries
- What are the 4 components of blood? Briefly describe them.
- Summarize the path of blood flow through the body