

# Body Systems Project

You will research a body system and teach our class all about the function and structures of your system. There will be at least one other student in your same class researching the same system. You will research separately but work together to teach to the class.

The final project will be a presentation where other students take notes from your presented information. This will count for note taking/research, science content standards 3.1 and 6, speaking and listening, and work ethic standards.

Name of Body System:

- I. Function
  - A. What job does the system do for the body?
  - B. Include all the functions if there are many.
  
- II. Structures
  - A. What organs make up the system?
  - B. List any specialized cells or tissues.
  - C. Include a diagram of the human system in your presentation.
  - D. Include a comparison with an invertebrate AND vertebrate along with the human structures.
    1. Be detailed as you compare the human system with the animals' system.
    2. Feel free to compare more than one invertebrate and vertebrate.
  
- III. Problems/Injuries/Disorders
  - A. List at least 2 problems/injuries/disorders for this system in humans.
  - B. Define and explain the problem (what happens to the body to affect homeostasis).
  - C. Include how to correct or treat the problems.
  
- IV. Giant in Science component
  - A. You will need to identify an important scientist or technological advancement and the contribution related to your body system.
  - B. Include the discovery, the scientist who is known FOR the discovery, and explain how this discovery has benefited science, including any future impact.
  
- V. Presentation Details
  - A. Your group will be expected to do a 15-20 minute presentation to your classmates about your system.
  - B. You will need to include a video clip (TED-Ed, Khan Academy, ADAM, Brainpop, etc.), and some form of worksheet or study guide along with a demonstration or model to enhance teaching of the system.
  - C. Feel free to create a Power Point, Prezi, use the SmartBoard, or use other tools to help with instruction.
  - D. Classmates will take notes from your presentation to learn the function and structures of YOUR system and to help them on the final test.

You must cite at least 2 sources in addition to your textbook for information in your independent research outline. You will need to keep this outline in your notebook and I will check progress during class. There will be 2 classroom days for independent research and 2 classroom days to work with your group to plan your presentation. Each person must present (4 sections of outline TO present: function, structures, problems, Giant of Science). Lessons must include a visual (something to see), an auditory (something to listen to), and a kinesthetic (something to do) component to them.

Independent research outline completed by end of class Friday, May 17<sup>th</sup>. Group planning for presentations Monday, May 20<sup>th</sup>. Final printing needs and complete presentation plan by end of class Tuesday, May 21<sup>st</sup>. Presentations **begin** on Wednesday, May 22<sup>nd</sup>. Feel free to work outside of class for your best success!

Standards	3	4
<b>Science 3.1 and Note Taking</b>	<b>Student has taken sufficient notes on the functions, structures, and problems of their body system in outline form.</b>	Student has expanded their research to include examples of both invertebrate and vertebrates beyond just human body system; student includes treatments of problems for the system.
<b>Science 6 Giants of Science</b>	<b>Student has included information on the scientist or technological advancement related to the body system and how it has been beneficial to science.</b>	Student has expanded their research to include analysis of how this discovery may impact the future of scientific understanding.
<b>Speaking and Listening</b>	<u>Delivery</u> <b>A combination of appropriate eye contact, clarity and projection of voice, tone and pace, and gestures</b>	Appropriate eye contact, clarity and projection of voice, tone and pace, and gestures <u>significantly</u> enhance the speaker's words; use of models/demonstrations/visuals enhances teacher delivery.
	<u>Research Analysis</u> <b>Clear use of facts and information with partially developed explanations in support of the speaker's ideas</b>	Clear and convincing command of facts and information with insightful explanations that help to illustrate the speaker's ideas.
<b>Work Ethic</b>	<input type="checkbox"/> <b>Student uses time efficiently for independent research and group preparation.</b> <input type="checkbox"/> <b>Student presentation is 15-20 minutes</b> <input type="checkbox"/> <b>Student presentation is organized</b>	Student takes on the role of the teacher by monitoring audience engagement, checking in with audience, and or dressing like a teacher.

Muscular – movement (pp. 24-28)

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Respiratory - brings oxygen (pp. 112-126)

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Digestive - breaks down food (pp. 60-71)

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Excretory - removes wastes (pp. 127-131)

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Skin (Integumentary)-outer covering (pp. 20-35)

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Skeletal - internal support (pp. 12-23)

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Circulatory - transport materials (pp. 78-102)

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