

Human Body Systems

Lesson Overview

During this lesson, students will explain relationships between the systems of the human body through creating a concept map.

Standards Addressed

SC 2005	7-3.3: Summarize the relationships of the major body systems.
SC 2014	7.L.3B.2 Construct explanations for how systems in the human body (including circulatory, respiratory, digestive, excretory, nervous, and musculoskeletal systems) work together to support the essential life functions of the body.
CCSS ELA	MS-LS1 Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
NGSS	MS-LS 1-3 Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

Disciplinary Literacy Best Practices

Concept Map

Lesson Plan

Time Required – One 60-minute Class Period

Disciplinary Vocabulary : integumentary system, skeletal system, muscular system, circulatory system, respiratory system, digestive system, excretory system, nervous system

Materials Needed:

- Chart Paper
- Markers
- Index Cards
- Glue or Tape

Assessment: Completed Concept Map

Engage

- The teacher will begin the lesson by asking students to brain storm information they learned on each of the human body systems and then share with their group to compare and contrast what they wrote. The teacher will then pull the class together and have students share out their thoughts.

Explore and Explain

- The teacher will ask students what kinds of relationships the body systems have to each other. After a brief class discussion on the relationships the teacher will explain how to create a concept map, hand out materials, and give students time to work. During this time the teacher will circulate around the room questioning students about the relationships they are making throughout the concept map. It is very important to ask students to explain why they are making the connections to assess their understanding. As well as to probe for additional relationships.
- Students will work in groups of 4 or 5. Each group will be given the materials and instructed to arrange the index cards on the chart paper. Students are to draw lines connecting the systems and then write a sentence explaining the relationship. Each student is required to make a certain number of connections and initial what they wrote. Students can write the explanations on the lines or they can number each line and write the explanations on another sheet of paper.
- Ask questions such as:
 - Do you think each system works in isolation? Why or why not?
 - Do you think any system is more important than the others? Explain
 - Explain how each system is related.

Teacher Reflections and Biographical Information

This is a great lesson to use to show relationships between concepts. I was amazed at the connections my students made within the human body systems. I used this as a formative assessment of their understanding of each system as well as how they are interrelated.

Lesson Author: Angie Greer is a 7th Grade Science Teacher at the Middle School of Pacolet in Spartanburg School District 3 in Spartanburg, SC. She is certified in Middle Level Math and Science, Elementary Education, and in School Leadership and Administration. She currently teaches 7th and 8th grade science, as well as STEMology.