Engage: The Great Body Relay - The Great Body Relay - Systems in Action



Objective:

Students will correctly match major organs to their functions and body systems while participating in a relay race. They will also explore how different body systems interact to keep the human body functioning.

Background:

The human body is like a well-organized team, with each organ playing a key role in helping the body function properly. These organs work

together in body systems, which carry out essential processes such as circulating blood, breaking down food, and removing waste.

Each system plays an important role, and many systems work together to keep us alive!

Student Reflection: Before the Race

Think about what you already know about body systems and answer the following questions:

- 1. Which body system do you think is the most important? Why?
 - I think the _____ system is the most important because
- 2. How do you think the circulatory system and respiratory system work together?





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- The circulatory and respiratory systems work together by _____.
- 3. How does the nervous system help control other body systems?
 - The nervous system helps control _____ by _____.

The Human Body Relay Race Activity

Instructions:

- 1. Your class will be divided into teams.
- 2. Each team will receive a set of organ cards and interaction cards (described below).
- 3. At each station, one person from your team will:
 - Pick an organ card.
 - Run to the <u>correct body system chart</u> and place the organ under the correct system.
 - Return to their team so the next runner can go.
- **4.** Once all organs are placed, teams will receive an interaction card. Each card describes how two body systems interact.
- **5.** Teams must correctly match their interaction card to the two body systems that work together.
- 6. The first team to correctly place all organs and match all interaction cards wins!

Student Output: After the Race

Reflect on your experience with the relay race by answering the following questions:

1. Which body system was easiest to match organs to? Why?

• The _____ system was easiest because _____.

2. Which body system was hardest to match? Why?

• The _____ system was hardest because _____.

3. How do two different body systems work together in real life?

• One example of two body systems working together is _____.

4. If you were designing a new interaction card, what two systems would you connect, and how would they work together?

I would connect the _____ system with the _____ system because _____.

Teacher Instructions & Preparation

"The Ultimate Human Body Relay: Race Through the Systems!"

Time Required:

60 minutes

Lesson Objective:

Students will correctly match major organs to their respective body systems and functions through a relay race. They will also explore system interactions and apply their learning through discussion and written reflection.

Lesson Plan Overview

Materials Needed:

- Organ Cards (one set per team, pre-cut)
- Interaction Cards (one set per team, pre-cut)
- Large posters or anchor charts labeled with the five body systems
- Markers or stickers for matching organs to systems
- Student worksheets for reflection and guiding questions
- Timer or stopwatch

Lesson Structure

1. Hook/Opener (10 minutes) – "Body Systems in Action"

Objective: Capture student interest and activate prior knowledge.

- 1. Engage students in a quick discussion:
 - Ask: "If you had to compare the human body to something, what would it be? A factory? A sports team? A city?"

- Encourage students to explain their answers.
- Guide them toward the idea that the body is like a team, with each system playing an essential role.

2. Quick Class Activity:

- Have students stand up and do a "Full Body Function Check":
 - Take a deep breath. (Respiratory System)
 - Feel your heartbeat. (Circulatory System)
 - Rub your hands together quickly. (Nervous System detecting heat)
 - Wiggle your fingers and toes. (Nervous and Muscular Systems working together)
 - Think about the last meal you ate. (Digestive System at work)
- Relate each motion to a system and set the stage for learning.

2. Inquiry & Pre-Discussion (10 minutes) – Guiding Questions

Before the activity, students reflect and discuss in small groups.

Guiding Questions:

- 1. Why do body systems need to work together instead of functioning alone?
- 2. What would happen if one system stopped working correctly?
- 3. Can an organ belong to more than one system? Why or why not?
- 4. How does the nervous system communicate with other systems?
- 5. Which system do you think is the hardest to live without? Why?

Instructional Strategy:

- Use Think-Pair-Share to allow students to discuss before sharing aloud.
- Encourage students to jot down their ideas on whiteboards or in notebooks.

3. Activity: Human Body Relay Race (20 minutes)

Setup:

- Divide students into teams of 4-5.
- Assign each team a starting station with a set of Organ Cards.
- Place five large posters labeled with the Circulatory, Respiratory, Digestive, Excretory, and Nervous Systems on the other side of the room.

Name: _____

Date: _____

• Interaction Cards will be introduced in Round 2 of the relay.

Round 1: Organ Match Relay

- 1. One student from each team picks up an organ card and runs to the correct system poster, placing the card under the system it belongs to.
- 2. That student runs back and tags the next teammate to go.
- 3. The team must work together to complete their matches as fast and accurately as possible.
- 4. Once finished, teams review their placements with the teacher before moving to Round 2.

Round 2: Interaction Match Relay

- 1. Teams receive an Interaction Card that describes two body systems working together.
- 2. They must run and place their card between the two system posters it describes.
- 3. The first team to correctly place all their interaction cards wins.

4. Inspection & Engagement Strategies (10 minutes)

After the race, bring students together for discussion and correct any organ mismatches.

Discussion Questions to Debrief:

- What was the most challenging system to categorize?
- How did your team work together to solve problems?
- Why do body systems need to communicate with one another?
- Can you think of a real-world example where body systems work together (e.g., playing a sport, eating a meal, exercising)?
- If you could add one more system to the relay race, which one would it be?

Engagement Strategies:

- Have students stand next to the system they feel is most important and explain their choice.
- Use a "What If?" scenario (e.g., "What if the nervous system stopped sending signals?") to encourage critical thinking.
- Assign small groups a body system and have them create a 30-second "commercial" to explain its importance.

5. Differentiation & Support Strategies

Name: _____

Date: _____

For Students with Gaps in Knowledge:

- Provide a pre-labeled chart as a reference to scaffold learning.
- Pair students with a peer mentor during the relay race.
- Allow students to work with a small group to discuss guiding questions before sharing.

For Special Education Students:

- Use color-coded organ cards to help with visual categorization.
- Assign a team coach (another student) to help explain and guide them through the race.
- Provide sentence stems to help with the reflection questions.

For English Language Learners (ELLs):

- Include visual supports (diagrams of organs and systems).
- Allow them to use word banks to support their written responses.
- Use gestures and movement to reinforce learning (e.g., touching the lungs while saying "lungs breathe in oxygen").

Closure & Exit Ticket (5 minutes)

To wrap up the lesson, have students answer one of the following:

Exit Ticket Options:

- 1. One new fact I learned about body systems today is _____.
- 2. One question I still have about body systems is _____.
- 3. If I could be any organ in the body, I would be _____ because _____.

Modification Option: Have students write their responses on sticky notes and place them under the corresponding system poster before leaving class.

Assessment & Evaluation

• Formative Assessment: Teacher observations during discussion, relay race participation, and guiding question responses.

Date: _____

- **Summative Assessment:** Student reflection responses and correct placement of organ and interaction cards.
- Self-Assessment: Students evaluate their teamwork and understanding through the exit ticket.