

Health Opportunities Through Physical Education

Lesson Plan 1: Body Systems

This lesson introduces the basic body systems, including their components and primary functions.

AAHE Standards

3.12.2 Use resources from home, school, and community that provide valid health information.

4.12.1 Use skills for communicating effectively with family, peers, and others to enhance health.

4.12.2 Demonstrate refusal, negotiation, and collaboration skills to enhance health and avoid or reduce health risks.

Preparing the Lesson

Lesson Objectives

1. Identify the major body systems.
2. Identify some of the functions and components of the body systems.
3. Explain the primary roles of each body system.

Preparation

1. Copy the lesson focus worksheet (**Worksheet: Focus on Body Systems**), the lesson application worksheet (**Worksheet: Body Systems Bingo**), and **Quiz: Body Systems**. Review the rules of the game being used for the lesson application.
2. Open the lesson 1 PowerPoint slides and set up your projector. Open slide 2 (journal question) so that it is visible when students enter the classroom.

Bell Ringer

Project slide 2 (journal question) onto the screen or write the question on the board. Make sure that students are on task upon arriving at class and allow them three to five minutes to write. Have students record their responses in their notebooks.

Journal question: How many body systems can you name? Which system do you think is the most interesting? Why?

Option: Give **Quiz: Body Systems** as a pretest to assess students' knowledge and focus their thinking. Have copies of the quiz on the desks before class or hand them out as students enter the room.

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Option: Have students read the Health Science feature and then discuss the questions from the Connect features in small groups.

Lesson Focus

Review chapter content using the PowerPoint slides for lesson 1. Have students take notes using **Worksheet: Focus on Body Systems**.

Option: Have students complete **Worksheet: Focus on Body Systems**. When all students have finished, review answers as a class.

Lesson Application

1. Distribute **Worksheet: Body Systems Bingo**.
2. Explain the activity to the class. Tell students that they'll be playing a bingo game in which you will read the clues aloud at random. If a square on their board matches the clue, they mark an X in that square. The first student to have a full row of X marks (across, down, or diagonal) calls out "body systems bingo." You will then check that student's answers for correctness.
3. Students must first create their own Body Systems Bingo board. They should do so by following the instructions in the worksheet.
4. Use the following statements as your clues (answers appear in parentheses). You can either read them in order or vary them while keeping track of which clues you have read so that you can check potential winning boards. If bingo is achieved before you have read out all of the clues, you may elect to play another game. To do so, simply have students create a new board, then read clues aloud to them as before. Repeat a few of the used clues as you go in order to increase the odds of a bingo being achieved.

Game Clues

- a. The trachea is part of this body system. (respiratory)
- b. Provides heart tissue with blood and nutrients. (coronary circulation)
- c. Tiny air sacs found in the respiratory system. (alveoli)
- d. System that provides all electrical signals of the body. (nervous)
- e. Controls actions such as digestion and breathing. (autonomic nervous system)
- f. Consists of more than 650 muscles. (muscular system)
- g. Type of muscle tissue found in the heart. (cardiac)
- h. Type of muscle found in hollow organs such as the stomach. (smooth)
- i. Controls all motor activities and is under your conscious control. (skeletal muscle)
- j. Organ found in the female reproductive system. (ovary)
- k. Part of the digestive system where most nutrients are absorbed. (small intestine)
- l. Body system consisting of glands that secrete hormones. (endocrine)
- m. Body system responsible for conception, development, and delivery of offspring. (reproductive)

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- n. Body system consisting of the skin, hair, and nails. (integumentary)
 - o. Outermost layer of the skin. (epidermis)
 - p. Deepest layer of the skin. (subcutaneous)
 - q. System consisting of the kidneys, bladder, urethra, and skin. (excretory)
 - r. Nephrons are small filtering units found in this organ. (kidney)
 - s. The appendix is part of this body system. (immune)
 - t. Organ that helps extract water from food and moves waste products out of the body. (large intestine)
 - u. Body system that includes 206 bones. (skeletal)
 - v. Type of circulation involving arteries and veins that feed the limbs. (systemic)
5. Place students into groups of three or four for part 2 (Body Systems Bingo Minigame Creation).
 6. Have students work in their teams to create a mini bingo board (three by three squares) and a set of 12 clues to use with that board. Encourage students to use various available resources in creating their new clues (e.g., websites, other textbook chapters, additional books or classroom materials).
 7. As time allows, play one or more of the games created by the students.

Reflection and Summary

Review the day's lesson by revisiting the lesson objectives. Formulate each objective as a question and solicit responses.

1. Identify the major body systems.
Call on students to name the body systems: respiratory, circulatory, nervous, muscular, skeletal, digestive, endocrine, reproductive, integumentary, excretory, and immune.
2. Identify some of the functions and components of the body systems.
See **Worksheet: Focus on Body Systems**.
3. Explain the primary roles of each body system.
See **Worksheet: Focus on Body Systems**.

Evaluate

Have students complete **Quiz: Body Systems**.

Option: Collect **Worksheet: Focus on Body Systems** or **Worksheet: Body Systems Bingo** and check for accuracy and completion.

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Reinforcing the Lesson

Take It Home

Encourage students to play their Body Systems Bingo minigame with a friend or family member to see how much he or she knows about human body systems.

Challenge Activity

Have students research one body system in detail. Have each student create a poster that summarizes his or her findings and includes drawings or photos. Consider assigning body systems to ensure that all systems are covered. To further challenge your students, have them identify and explain a common disease affecting their chosen system.