Lesson: Human Body Breakout (Digital)

Lesson Overview: In this lesson, students will use their knowledge of the six human body systems to complete a digital breakout. The first team to “breakout” is the winner!

Standards Addressed

7.L.3B.1 Develop and use models to explain how the structural organizations within multicellular organisms function to serve the needs of an organism.

Disciplinary Literacy Strategies

- Mix, Freeze, Pair, Share
- Making Thinking Visible
- Gallery Walk
- Triangle, Circle, Square Reflection

Computational Thinking

Tools: Breakout (Digital)

Cornerstone(s) Addressed:

- Decomposition – Students will solve each piece of the breakout before moving to the next. This will give the students smaller, more manageable amount of questions to work on at a time.
- Algorithmic Thinking – Students must sequence the steps of the Excretory System.
- Abstraction – Students will weed out the correct answers from incorrect answers to move through the breakout.

Lesson Plan

Time required: two 50-minute class periods

Focus Question(s): What connections can you make between the six systems of the human body?

Disciplinary Vocabulary: Circulatory, Respiratory, Musculoskeletal, Nervous, Excretory, Digestive systems and organs within each system.

Materials needed:

- Chromebooks (or other device) with internet access
- chart paper
- markers/crayons/colored pencils
- sticky notes
- paper/pencil for each student

Engage

Provide students with the following scenario. “You and your classmates have joined Mrs. Frizzle on a Magic Schoolbus adventure through the human body. While traveling, Mrs. Frizzle realizes the button that takes the bus out of the body, has broken. You must use the links, clues, and answers you find on the breakout site, to unlock each part of the path. Once unlocked the path to the button opens; fix it and leave the body safely. Some of you need to use the restroom, some can’t breathe, others are feeling weak and some are numb, help before it is too late. Good Luck!”.

Explore

Students work in the virtual breakout to review vocabulary terms and sequences of the body systems in order
to breakout. **NOTE: The breakout includes instructions, clues, and problems to solve.**

Link: [https://sites.google.com/view/bodysystemshuman/home](https://sites.google.com/view/bodysystemshuman/home)

**Explain**

Students move back to seats to debrief learning. Using the Mix, Freeze, Pair, Share strategy, the students will move around the room as music plays. When the music stops, they will freeze and turn to a classmate close by to pair and share how they solved the different parts of the breakout, the procedures used, the learning and questions they still have. The teacher should lead a class discussion on each part of the breakout to ensure student understanding.

**Elaborate**

Students will create a visual representation of each of the 6 body systems. The students will be divided into six groups. Each group will be given a notecard with one of the six body systems. The group will then use a piece of chart paper and markers/crayons/colored pencils to draw a representation of the system they were given. When the groups are finished, the chart paper will be hung on the wall and the class will conduct a gallery walk to look at the different drawings. The students will have post-it notes as they look at each drawing to leave questions or feedback for each group.

**Evaluate**

Students will individually complete an exit ticket using the Triangle, Circle, Square Reflection strategy; 3 points to remember, questions going around in my mind, and something that squares with my understanding.

**Assessment Notes:**

Use the elaborate portion of this lesson to discuss any misconceptions the students have about the six systems of the human body. Some common misconceptions to look for:

- Systems operate in isolation from each other
- Intestines are in the stomach
- Blood leaves the vessels and enters parts of the body
- The only gas we breathe out is carbon dioxide
- Food goes from the stomach to the blood stream
- Air travels to the body in air vessels like blood

**Resources:**

Link to the Human Body breakout: [https://sites.google.com/view/bodysystemshuman/home](https://sites.google.com/view/bodysystemshuman/home)

**Teacher Biographical Information**

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