

2021 MCAS Sample Student Work and Scoring Guide

Grade 8 Science and Technology/Engineering Question 13: Constructed-Response

Reporting Category: Life Science

Standard: [6.LS.1.3](#) - Construct an argument supported by evidence that the body systems interact to carry out essential functions of life.

Item Description: Identify body systems that are involved in getting nutrients from food to different parts of the body and describe how the systems work together.

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Scoring Guide

Select a score point in the table below to view the sample student response.

Score*	Description
3A	The response demonstrates a thorough understanding of the general functions of major systems of the human body and describes ways that these systems interact with each other. The response correctly identifies and clearly describes two body systems that work together to deliver nutrients to different parts of the runner's body.
3B	
2	The response demonstrates a partial understanding of the general functions of major systems of the human body and describes ways that these systems interact with each other.
1	The response demonstrates a minimal understanding of the general functions of major systems of the human body and describes ways that these systems interact with each other.
0	The response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.

*Letters are used to distinguish between sample student responses that earned the same score (e.g., 3A and 3B).

Score Point 3A**This question has two parts.**

Before a race, a runner eats a banana. The banana provides nutrients that help the runner complete the race.

Part A

Identify **two** body systems that are involved in getting the nutrients from the banana to different parts of the runner's body.

The digestive system and the circulatory system.

Part B

Describe how the two body systems you identified in Part A work together to get the nutrients to different parts of the runner's body.

The digestive breaks down food in order to get the nutrients. Then the circulatory system absorbs the nutrients and moves them around the body to give cells energy.

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Score Point 3B**This question has two parts.**

Before a race, a runner eats a banana. The banana provides nutrients that help the runner complete the race.

Part A

Identify **two** body systems that are involved in getting the nutrients from the banana to different parts of the runner's body.

The digestive system and the circulatory systems are involved in getting the nutrients from the banana to different parts of the body.

Part B

Describe how the two body systems you identified in Part A work together to get the nutrients to different parts of the runner's body.

First, the food enters the mouth then is swallowed. The digestive system then breaks down the banana so that the body can use it. The circulatory then carries the nutrients through the bloodstream to the different cells that need it.

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Score Point 2**This question has two parts.**

Before a race, a runner eats a banana. The banana provides nutrients that help the runner complete the race.

Part A

Identify **two** body systems that are involved in getting the nutrients from the banana to different parts of the runner's body.

Two body systems that are involved in getting the nutrients from the banana to different parts of the runner's body are the digestive system and the circulatory system.

Part B

Describe how the two body systems you identified in Part A work together to get the nutrients to different parts of the runner's body.

The two body systems I identified in Part A work together to get the nutrients to different parts of the runner's body by the digestive system breaking down the banana and getting the nutrients and the circulatory system taking those nutrients.

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Score Point 1**This question has two parts.**

Before a race, a runner eats a banana. The banana provides nutrients that help the runner complete the race.

Part A

Identify **two** body systems that are involved in getting the nutrients from the banana to different parts of the runner's body.

Digestive system and Circulatory system.

Part B

Describe how the two body systems you identified in Part A work together to get the nutrients to different parts of the runner's body.

The Circulatory system takes the nutrients from the banana and gives the runner energy. The digestive system kind of does the same thing then the banana comes out when all the nutrients is stored.

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Score Point 0**This question has two parts.**

Before a race, a runner eats a banana. The banana provides nutrients that help the runner complete the race.

Part A

Identify **two** body systems that are involved in getting the nutrients from the banana to different parts of the runner's body.

The bannana provides energ to the heart, and potasium to the muscles, so that the runner can have energy and be strong.

Part B

Describe how the two body systems you identified in Part A work together to get the nutrients to different parts of the runner's body.

When you have energy, and strength, your mucles feel stronger so you can run faster, and you'll have lots of energy to run fast.

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