

SCIENCE GRADE 5

A. Open-Ended (OE) 4 points

Mean: 0.17

Standard: II.b.C.3

Strand: Content of Science

Content Standard: Life Science: Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

Benchmark: Know the parts of the human body and their functions.

3. Describe the relationships among cells, tissues, organs, organ systems, whole organisms, and ecosystems.

Important functions in the human body are carried out by one or more organ systems working together.

- A. Describe one example of how the digestive system and respiratory system work together to keep a human body functioning.
- B. Describe one example of how the muscular system and the circulatory system work together to keep the human body functioning

A.

B.

B. Rubric

Sample response:

Part A. The respiratory system carries oxygen to the cells in the body. Cells in the digestive system use the oxygen to breakdown food that gives energy to the cells in the body.

Part B. The circulatory system carries food and oxygen to the muscles in the body. The muscular system uses the oxygen and food to move the muscles and help the organism move around.

Score	Description
4	The student demonstrates thorough understanding of the relevant scientific concepts and/or procedures. The student completes the task correctly, using scientifically sound procedures and provides clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of thorough understanding.
3	The student demonstrates an understanding of the relevant scientific concepts and/or procedures. The student completes most of the task correctly, but the scientific procedures, explanations and/or interpretations are incomplete or only partially supported. The response may contain minor flaws that indicate some misunderstanding of the scientific concepts and/or procedures.
2	The student demonstrates partial understanding of the relevant scientific concepts and/or procedures. The response includes some correct information, but indicates a lack of essential understanding of the scientific concepts and/or procedures. Explanations and/or interpretations are incomplete or only partially supported. The response may contain flaws that indicate misunderstanding of the task or of the scientific concepts and/or procedures.
1	The student demonstrates a minimal understanding of the relevant scientific concepts and/or procedures. The student has reached an inadequate conclusion and/or provided reasoning that is faulty or incomplete. The response is incomplete and exhibits many flaws, but does contain some correct work that addresses the task.
0	The student demonstrates no understanding of the relevant scientific concepts and/or procedures. The response is incorrect or irrelevant to the skill or concept being measured, or no response is provided.

C. Student Responses

High

- ⁴⁰ A. The digestive system and respiratory system work together when a person breathes. When oxygen and digested food meet, they form energy.
- B. The muscular system and the circulatory system work together too. The circulatory system brings blood to the muscles that make our bodies work.

Mid

- ⁴⁰ A. The respiratory system helps us breathe in oxygen into our body and the stomach gives vital nutrients.
- B. The circulatory system pumps oxygen rich air into our muscles.

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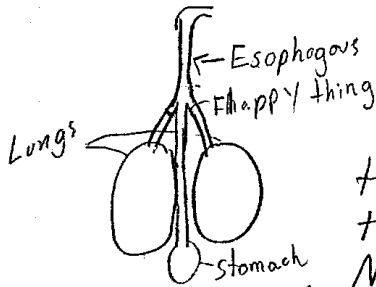
A. The respiratory and digestive system works. By the digestive system extracting (taking out) the nutrients from the food or drink. Then sends the rest to the respiratory to dump the waste.

B. The muscular and circulatory system works. By the circulatory system getting the blood cells and air to the muscles so they don't soften.

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A.



When you eat, food goes down through your Esophagus leading to your stomach. On the way down to your stomach the food goes past your lungs. Now there is a little flap-

like piece of skin that opens up for air but closes when food or water comes. If we didn't have that flap then food or water would just go down into our lungs causing us to cough.

B. The muscular system helps with movement; the circulatory system keeps your blood going. The blood has to go down to your muscles so that they can move to us be able to move.

A. The digestive system help turn the food we eat into nutrients, and the respiratory system takes in oxygen and delivers out harmful gases.

B. They both help by circulating blood around your body and moves blood to your muscles and it keeps your body moving.

40 A. When you eat, your digestive system sends the nutrients from the food you eat to your heart, and your lungs send the oxygen to your heart, and your heart sends it all over your body.

B. Your heart sends blood carrying nutrients and oxygen to your muscles so they can move.

Low

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A. The digestive system cleans out the waste and the respiratory system cleans bacteria

B. The muscular system helps the person move and the circulatory system pumps blood to the muscles and everything else.

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A. Your respiratory system and digestive system work together by getting food to your stomach and getting the nutrients that you need to your body.

B. The muscular and circulatory systems work together by keeping the heart pumping and circulating blood through the body.

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A. By breathing in oxygen helps us ~~digest~~ our food.



B. when your blood pumps it gives your muscles oxygen.



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A. The Heart keeps are body bumping are blood throw are body. the lung helps us to breath

combien dey oxside out and oxygen in.

B. they helps us move and

they also help us

eat so when we eat we need are bones moves to help us eat food

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A. The digestive system gets the nutrients out of the food so that the respiratory can get it and help the body.

B. The circulatory system gets the blood going around so that the muscles can get it and help the body.