

Body Systems Working Together

Grade 5 • SCIENCE • Students practice explaining how the digestive, respiratory, and circulatory systems work together to supply body cells with nutrients and oxygen. • Standards: 4-LS1-1

Answer each question about how your digestive, respiratory, and circulatory systems work together to keep your body healthy. Write complete sentences when asked.

1. Which system breaks down food into nutrients your body can use?
2. Which system brings oxygen into your body when you breathe?
3. Which system carries blood throughout your body?
4. After food is broken down in the small intestine, where do the nutrients go next?
5. In the lungs, oxygen moves from the air into which part of the circulatory system?
6. What two important things does blood deliver to all the cells in your body?
7. Explain why your body needs both the digestive system and the circulatory system to get energy to your muscles.
8. When you exercise, your breathing gets faster. Explain how this helps your circulatory system deliver more oxygen to your body cells.
9. Describe the path oxygen takes from the air outside your body to a muscle cell in your leg. Include at least three body parts or systems in your answer.
10. A student eats a sandwich at lunch. Explain how all three systems (digestive, respiratory, and circulatory) work together so that the energy from that sandwich can help the student run during recess.

Answer Key — Body Systems Working Together

For the teacher / parent. Do not distribute with the worksheet.

1. The digestive system
2. The respiratory system
3. The circulatory system
4. Into the bloodstream (or into the blood)
5. The blood (or bloodstream or blood vessels)
6. Oxygen and nutrients
7. The digestive system breaks down food into nutrients, and the circulatory system carries those nutrients through the blood to the muscles.
8. Faster breathing brings more oxygen into the lungs, so more oxygen can move into the blood and be carried to the cells.
9. Oxygen enters through the nose or mouth, goes to the lungs, moves into the blood, and is carried by the circulatory system to the muscle cell.
10. The digestive system breaks down the sandwich into nutrients in the small intestine. The nutrients enter the bloodstream. The respiratory system brings oxygen into the lungs and into the blood. The circulatory system carries both oxygen and nutrients through the blood to the muscle cells, where they are used for energy to run.