

Lab 7. Respiratory and Cardiovascular Systems: How Do Activity and Physical Factors Relate to Respiratory and Cardiovascular Fitness?

There are many systems in the body that must work together to sustain life. Systems such as the respiratory system, circulatory system, and digestive system are involved in making sure our bodies have the energy it needs to function.

1. Use what you know about energy transfer and each of these systems to describe how they work together to help our body function.

2. Jeremy made the claim in science class that most body systems work together, but the nervous system is the only one that operates in isolation. Do you agree with Jeremy? Explain your reasoning.

3. Scientists should not allow their society or culture to influence their work.

- a. I agree with this statement.
- b. I disagree with this statement.

Explain your answer, using an example from your investigation about the respiratory and cardiovascular systems.

4. Investigations in medical science often involve people, so experiments are not used.

- a. I agree with this statement.
- b. I disagree with this statement.

Explain your answer, using an example from your investigation about the respiratory and cardiovascular systems.

5. Scientists often generate models when they are working with complex systems or events. Explain why using models in science is helpful, using an example from your investigation about the respiratory and cardiovascular systems.

6. Scientists often investigate how the structure of something is related to its function. Explain how structure and function are related, using an example from your investigation about the respiratory and cardiovascular systems.