

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Answer Key: Fast Muscles and Fit Hearts 4th Grade Quiz

Oxygen transport, muscle fuel, and sweat production. This quiz helps students identify how their organs coordinate during active play and sports.

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**1. When you start playing a game of tag, why does your heart start beating faster?**

**Answer:** B) To move oxygen and energy to your working muscles

The heart acts as a pump that speeds up during exercise to deliver the oxygen and nutrients muscles need to keep moving.

**2. Sweating is the body's way of cooling itself down so your internal temperature doesn't get too high.**

**Answer:** A) True

As muscles work, they create heat; evaporation of sweat from the skin helps regulate our body temperature.

**3. To get more oxygen into your blood while you run, your \_\_\_\_\_ rate increases naturally.**

**Answer:** C) breathing

Breathing faster allows the lungs to take in more oxygen, which the blood then carries to the rest of the body.

**4. Which of these is a long-term benefit for someone who practices soccer every day for a year?**

**Answer:** A) Their heart becomes a stronger and more efficient pump

Consistent exercise causes the heart to adapt, making it stronger so it doesn't have to work as hard during rest.

**5. After a long bike ride, the body needs \_\_\_\_\_ and nutrients to help repair tired muscles.**

**Answer:** D) rest

Rest is essential for recovery, allowing the body to fix minor wear and tear in the muscles so they get stronger.

**6. What happens to your face when your blood vessels expand to release heat during exercise?**

**Answer:** C) It looks flushed or red

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Blood moves closer to the surface of the skin to help heat escape, which often makes people look red or flushed.

**7. Your muscles use a type of sugar called glucose as a fuel source to help you move.**

**Answer:** A) True

Glucose from the food we eat provides the chemical energy that muscles turn into movement.

**8. If you lift a heavy backpack many times a week, your muscles will grow \_\_\_\_\_ to make the job easier.**

**Answer:** B) stronger

Resistance or weight training causes muscle fibers to adapt and become thicker and stronger.

**9. Only professional athletes have a heart rate that changes when they run.**

**Answer:** B) False

Every human body responds to exercise by increasing the heart rate to meet the body's demand for energy.

**10. Which of the following is a sign that your body is working hard during physical activity?**

**Answer:** A) Deeper and faster breathing

Deeper breathing is a primary acute response to exercise as the body tries to take in more oxygen.