

The Science of Moving

Exercise Science · Answer Key · 18 Questions

1. Which organ is responsible for pumping blood throughout the body during exercise?

- A) Lungs
- B) Heart**
- C) Liver
- D) Stomach

2. What are the flexible tissues that connect muscles to bones?

- A) Tendons**
- B) Ligaments
- C) Cartilage
- D) Nerves

3. Which nutrient is the body's primary source of fuel for high-intensity exercise?

- A) Protein
- B) Fiber
- C) Carbohydrates**
- D) Calcium

4. What is the name of the process by which muscles grow larger and stronger after resistance training?

- A) Hypertrophy**
- B) Atrophy
- C) Digestion
- D) Oxidation

5. Which gas do humans breathe in more of during exercise to help muscles produce energy?

- A) Carbon dioxide
- B) Nitrogen
- C) Helium
- D) Oxygen**

6. Where in the human body are red blood cells produced?

- A) Bone marrow**
- B) Brain
- C) Muscles
- D) Skin

7. What is the main function of the triceps muscle located in the upper arm?

- A) Flexing the elbow
- B) Extending the elbow**
- C) Rotating the shoulder
- D) Clenching the fist

8. Which type of exercise primarily improves the efficiency of the heart and lungs?

- A) Aerobic**
- B) Flexibility
- C) Balance
- D) Anaerobic

9. What is the primary function of the skeletal system during movement?

- A) To digest food
- B) To provide structural support**
- C) To transport oxygen
- D) To filter blood

10. What waste product builds up in the muscles during very intense, short-duration exercise?

- A) Lactic acid**
- B) Glucose
- C) Insulin
- D) Adrenaline

11. Which of these is a voluntary muscle found in the human body?

- A) Cardiac muscle
- B) Smooth muscle
- C) Biceps brachii**
- D) Stomach muscle

12. What is the primary role of sweat during physical activity?

- A) To remove protein
- B) To regulate body temperature**
- C) To build muscle
- D) To store energy

13. How many chambers does the human heart have?

- A) Two
- B) Three
- C) Four**
- D) Five

14. Which mineral is most important for maintaining strong bones?

- A) Iron
- B) Calcium**
- C) Sodium
- D) Zinc

15. What is the term for the amount of air a person can exhale after taking the deepest breath possible?

- A) Vital capacity**
- B) Tidal volume
- C) Heart rate
- D) Blood pressure

16. Which part of the brain coordinates balance and voluntary movement?

- A) Cerebellum**
- B) Brain stem
- C) Medulla
- D) Frontal lobe

17. What are the microscopic functional units of a muscle fiber called?

- A) Neurons
- B) Sarcomeres**
- C) Axons
- D) Dendrites

18. Which vessel carries oxygen-rich blood away from the heart to the rest of the body?

- A) Vein
- B) Capillary
- C) Artery**
- D) Valve