

Name: _____

Date: _____

Supercharge Your Systems: A 3rd Grade Exercise Physiology Quiz

Students analyze how internal engines power external movements by identifying the long-term rewards of consistent physical activity and immediate body responses.

1. Imagine your heart is a pump. If you practice soccer every day for a year, how does your 'pump' change to become more efficient?

- A. It beats much faster while you are sleeping
- B. It gets stronger, pushing more blood with every single beat
- C. It stops working during rest time to save power
- D. It shrinks in size so it takes up less room in the chest

2. True or False: Your body uses the exact same energy 'fuel system' for a 5-second power jump as it does for a 20-minute slow jog.

- A. True
- B. False

3. During a game of Tag, you start breathing heavily. This is an example of an _____ response, because it happens immediately to help your muscles get oxygen.

- A. Ancient
- B. Acute
- C. Accidental
- D. Aching

4. After doing many push-ups, your muscles might feel a 'burning' sensation. What is your body telling you through this physiological feedback?

- A. Your bones are turning into liquid
- B. Energy byproducts are building up in the muscle
- C. Your muscles are getting smaller immediately
- D. The air in the room is too hot to breathe

5. True or False: 'Recovery' is a passive time where nothing happens; the body only improves while you are actually moving.

- A. True
- B. False

6. If a gymnast practices their balance and strength for months, their brain and muscles communicate faster. This long-term change is called a _____ adaptation.

- A. Chronic
- B. Quick
- C. Critical

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D. Crowded

7. Why does your face sometimes turn red when you run fast on the playground?

- A. Your body is trying to hide from other players
- B. Blood is moving closer to the skin to help release heat
- C. You are running out of skin cells
- D. Your blood is thick and getting stuck in your cheeks

8. To perform a single, powerful 'vertical jump' to grab a basketball rim, your body uses its _____ stores for a burst of speed without needing extra oxygen yet.

- A. Long-term
- B. Immediate
- C. Frozen
- D. Sleepy

9. True or False: A cool-down after a race helps the body transition back to its resting state and slowly lowers the heart rate.

- A. True
- B. False

10. Which of these is a 'fuel' your body uses more of during a long, steady bike ride compared to a 2-second clap?

- A. Inhaled Oxygen
- B. Carbon Dioxide
- C. Gravity
- D. Muscle tears