

Name: _____ Date: _____

Nail the Pace: 5th Grade Motion & Kinematics Quiz

Learners build foundational recall by identifying how objects change position, track speed, and observe acceleration in everyday playground scenarios.

1. Imagine a soccer ball rolls from the center of the field to the goal. What do scientists call the change in the ball's position?

- A. Gravity
- B. Displacement
- C. Volume
- D. Weight

2. True or False: If a skateboarder travels 5 meters every second in a straight line, they are moving at a constant velocity.

- A. True
- B. False

3. When a bicyclist starts to pedal harder to go faster, they are engaging in _____.

- A. Friction
- B. Stopping
- C. Acceleration
- D. Rest

4. A toy car travels 20 centimeters in 2 seconds. Which of these tells us how fast the car is going?

- A. Mass
- B. Temperature
- C. Speed
- D. Density

5. True or False: Kinematics is the study of why objects move, including the forces like pushes and pulls.

- A. True
- B. False

6. If a bird flies 10 miles North, the 'North' part of this description tells us the bird's _____.

- A. Direction
- B. Weight
- C. Height
- D. Color

7. Which of these is an example of acceleration?

- A. A book sitting on a shelf

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- B. A car slowing down at a red light
- C. A rock buried in the dirt
- D. A sign standing still

8. To find out how far a ladybug traveled, you would measure the _____ between its start and end points.

- A. Time
- B. Distance
- C. Force
- D. Sound

9. True or False: If a runner finishes a race exactly where they started, their total displacement is zero.

- A. True
- B. False

10. If we say a paper airplane is moving '3 meters per second West,' we are describing its:

- A. Mass
- B. Volume
- C. Velocity
- D. Friction