Science Fables

The Race Around the Park: Speed and Velocity

Story Quiz

This quiz follows Emma, Noah, and Dad at the park as they learn the difference between speed and velocity—and how distance and displacement fit in.

1. What does speed tell us?

A. How far away something is
B. How fast something moves
C. Which direction something moves
D. Where something started

2. Which formula is used to calculate speed?

A. Speed = Time ÷ Distance
B. Speed = Distance + Time
C. Speed = Distance ÷ Time
D. Speed = Distance × Time

3. What makes velocity different from speed?

A. Velocity includes direction
B. Velocity does not use time
C. Velocity is always slower
D. Velocity only measures distance

4. Emma and Noah walked one complete lap and returned to where they started. What was their displacement?

A. 400 m
B. One whole lap
C. 100 m
D. 0 m

5. Two cyclists both travel at 10 km/h, but one goes north and the other goes south. What is true?

A. They have different speeds and the same velocity
B. They have the same speed but different velocities
C. They have the same speed and the same velocity
D. They have no velocity

Answer Key

1. B — How fast something moves

Speed tells us how fast something moves.

2. C — Speed = Distance ÷ Time

Speed is calculated as distance divided by time.

3. A — Velocity includes direction

Velocity is different from speed because velocity includes direction.

4. D — 0 m

Because they ended where they started, their displacement was 0 m.

5. B — They have the same speed but different velocities

They have the same speed but different velocities because they are moving in opposite directions.