

How Soccer Can Help Us Understand Physics Comprehension Questions

1. Once it is in motion, what does an object like a soccer ball have a natural tendency to do?

- A. It has a natural tendency to keep moving.
- B. It has a natural tendency to stop.
- C. It has a natural tendency to change direction.
- D. It has a natural tendency to slow down.

2. What does the author explain in this passage?

- A. The author explains the force of friction, using different kinds of music as examples.
- B. The author explains the sport of soccer, using examples of current teams and players.
- C. The author explains the idea of motion, using different sports as examples.
- D. The author explains the importance of bike safety, using helmets as an example.

3. Swimmers wearing full-body suits that reduced underwater friction were able to swim faster than other swimmers. What evidence from the passage supports this statement?

- A. Some swimmers shaved their entire bodies to reduce friction caused by hair and increase their speed.
- B. After losing contests by a tenth of a second, some swimmers started ridding their bodies of hair to reduce friction.
- C. Swimmers wearing full-body suits swam at the same speed as swimmers wearing shirts and shorts that clung closely to their skin.
- D. Swimmers wearing full-body suits began to break world records and started winning all the races.

4. Based on the information in the passage, how can friction be described?

- A. Friction can be described as a force that acts on an object in motion and can cause the object to stop.
- B. Friction can be described as a force that acts on an object in motion and can cause the object to speed up.
- C. Friction can be described as the path an object takes after a force acts on it and causes it to move.
- D. Friction can be described as the path an object takes when a force acts on it inside a vacuum.

5. What is the passage mainly about?

- A. why swimmers and cyclists move at different speeds
- B. the motion of bodies and objects
- C. the movement of an object inside a vacuum
- D. the scientific discoveries of Sir Isaac Newton

6. Read the following sentence:

“Newton suggested that objects like the soccer ball have a natural **tendency** to keep moving. The only reason they stop, he believed, is because an unbalanced force acts on them.”

What does the word **tendency** mean?

- A. a very small chance of something happening
- B. a fifty-fifty chance of something happening
- C. the fear of doing something or acting in a certain way
- D. the way something normally behaves or acts

7. Choose the answer that best completes the sentence below.

Newton suggested that a ball has a natural tendency to keep moving _____ others believed that a ball has a natural tendency to stop.

- A. although
- B. because
- C. before
- D. later on

8. What are some things cyclists do to reduce friction?

9. According to Newton's First Law of Motion, what will happen to a soccer ball that is kicked?

10. The end of the passage states that without the forces of physics, every time you kicked a soccer ball or jumped on a bike, the ball and the bike would keep going, forever. Explain why the ball and bike would keep going, using evidence from the passage.