

## Sir Isaac Newton and LeBron James Comprehension Questions

1. What is Sir Isaac Newton's Third Law of Motion?

- A. Objects at rest and objects in motion will remain at rest or in motion, unless they are acted upon by an unbalanced force.
- B. For every action there is an equal and opposite reaction.
- C. When a force acts on a mass, acceleration is produced.
- D. When a force acts on a mass, the mass increases.

2. What does the author describe in the passage?

- A. Sir Isaac Newton's most famous book, *Mathematical Principles of Natural Philosophy*
- B. how LeBron James developed his basketball dunking skills
- C. how Sir Isaac Newton came up with the three basic laws of motion
- D. how the way that LeBron James dunks a basketball illustrates Newton's Third Law of Motion

3. Read the following sentences from the passage:

“When LeBron James jumps, he pushes down on the surface of the court. This is the 'action' that Newton mentions in his Third Law.”

Based on this information, LeBron James jumping is an example of which part of Newton's Third Law?

- A. both the action and the equal and opposite reaction
- B. the equal and opposite reaction of an action
- C. the action which causes an equal and opposite reaction
- D. neither the action nor the equal and opposite reaction

4. The force created when the court pushes LeBron James upwards is equal to which force?

- A. the force LeBron James used to dunk the ball
- B. the force LeBron James drives into the court when he jumps
- C. the force LeBron James uses to throw the ball
- D. the force LeBron James drives into the court when he lands after jumping

5. What is the main idea of this passage?

- A. LeBron James and Michael Jordan are two of the best players in the history of professional basketball.
- B. Basketball players must have high vertical leaps in order to dunk basketballs.
- C. Newton's Third Law of Motion is related to the First and Second Laws of Motion.
- D. Newton's Third Law of Motion can be examined using the examples of basketball players jumping.

6. Read the following paragraph from the passage:

“LeBron James is a big man. He is 6 feet, 8 inches tall. He weighs 245 pounds. When he is standing upright, with his arms raised above his head, his reach extends to 8 feet and 10¼ inches.”

How can the tone of the author best be described in this paragraph?

- A. humorous
- B. angry
- C. disinterested
- D. factual

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

\_\_\_\_\_ LeBron James has an impressive vertical leap of 44 inches, Michael Jordan holds the record with a vertical leap of 48 inches.

- A. In contrast
- B. For example
- C. Although
- D. Initially

**8.** According to the passage, in order for LeBron James to score a slam-dunk, what must he exert?

**9.** When LeBron James jumps, he is driving force into the court. How is this force created?

**10.** How does the example of LeBron James jumping to dunk a basketball illustrate Newton's Third Law of Motion? Use information from the passage to support your answer.