

Name \_\_\_\_\_



## Forces in Sports

Newton's laws of motion are everywhere, including in sports! Athletes use these laws to run, jump, throw, and play games. Let's explore how forces come into play in some popular sports.

Example: In baseball, when a pitcher throws the ball, they use their muscles to apply force to the ball, making it move fast. The batter swings the bat, applying force in the opposite direction to hit the ball. The ball flies because of these forces.

Real-world application: When you kick a soccer ball, you apply a force with your foot. The ball then moves in the direction you kicked it because of the force you applied, following Newton's laws.

## Questions

1. How do athletes use Newton's laws of motion in sports?
2. Describe how forces are involved when a pitcher throws a baseball.
3. What force does a batter apply when hitting a pitched ball?
4. How does a soccer player make the ball move when they kick it?
5. Can you think of another sport where forces play a crucial role?