

Name _____

Motion and Safety

Understanding Newton's laws of motion can help keep us safe in everyday life. For instance, when you wear a seatbelt in a car, you're following Newton's First Law, which says objects in motion tend to stay in motion. Seatbelts help you stay safely in your seat during sudden stops.



Example: Imagine riding a bike downhill. If you suddenly apply the brakes, you slow down due to Newton's Second Law. The force of braking acts against your forward motion, helping you stop safely.

Real-world application: Wearing a helmet while biking or skating is essential because it protects your head if you fall. It's a way to follow Newton's Third Law by reducing the impact force during an accident.

Questions

1. How can understanding Newton's laws of motion help keep us safe?
2. Explain how wearing a seatbelt in a car is related to Newton's First Law.
3. How does braking on a bike downhill relate to Newton's Second Law?
4. Why is it important to wear a helmet while biking or skating?
5. Can you think of another safety measure that is influenced by Newton's laws?