

Name _____

Newton's Second Law

Answer Key

1. Newton's Second Law of Motion explains how the speed and direction of an object change when a force is applied to it.
2. The acceleration of an object increases when a greater force is applied to it.
3. According to this law, the acceleration of an object is inversely proportional to its mass, meaning that a heavier object will accelerate less for the same force compared to a lighter object.
4. An everyday situation where this law is at play is kicking a soccer ball. The harder you kick it, the faster it accelerates.
5. A lighter wagon accelerates faster than a heavier one when pushed with the same force because the lighter wagon has less mass, and according to the second law, less mass leads to greater acceleration for the same force.