Name _____

Newton's Second Law Unveiled

Multiple Choice Questions

1. What does Newton's second law of motion describe?

a) The relationship between force and mass

b) The relationship between velocity and acceleration

c) The relationship between energy and motion

d) The relationship between time and distance

2. According to Newton's second law, what happens to an object's acceleration when the applied force increases?

a) The acceleration decreases.

b) The acceleration remains constant.

c) The acceleration increases.

d) The acceleration is not affected by force.

3. If you apply the same force to two objects with different masses, which object will experience greater acceleration?

a) The object with greater mass

b) The object with smaller mass

c) Both objects will accelerate equally.

d) It depends on the direction of the force.

4. What is the unit of force?

a) Kilogram (kg)

b) Meter per second squared (m/s^2)

c) Newton (N)

d) Joule (J)

5. How does friction affect an object's acceleration?

a) Friction has no effect on acceleration.

b) Friction always increases acceleration.

c) Friction always decreases acceleration.

d) Friction can either slow down or prevent acceleration.