

Name \_\_\_\_\_

## Forces in Motion

### Answer Key

1. Forces change the motion of an object by making it speed up, slow down, or change direction.
2. According to Newton's Second Law, the acceleration of an object depends on the net force applied to it.
3. In the example of a rocket, the rocket engines produce a powerful force that propels the rocket upward, and as the rocket's fuel burns, it becomes lighter, affecting the net force and causing acceleration.
4. To make a skateboard speed up, you apply a force by pushing it. To slow it down, you apply an opposite force by dragging your foot on the ground.
5. Forces are involved in stopping a moving bicycle when you apply the brakes. The brake pads create friction with the wheels, which is a force that slows down the bike, bringing it to a stop.