

Name \_\_\_\_\_

## Balancing Forces

### Answer Key

1. Equilibrium is a state where forces on an object are balanced, causing no change in motion.
2. Forces are balanced in an object when they cancel each other out, resulting in no net force.
3. An example of forces being balanced in everyday life is when you push a shopping cart with just the right amount of force to keep it moving at a constant speed.
4. A book doesn't move when you push it with a certain force because the force you apply is balanced by the equal and opposite force of friction with the table.
5. Equilibrium relates to riding a bike on a flat road because the force of your pedaling is balanced by the force of air resistance, causing you to maintain a constant speed.