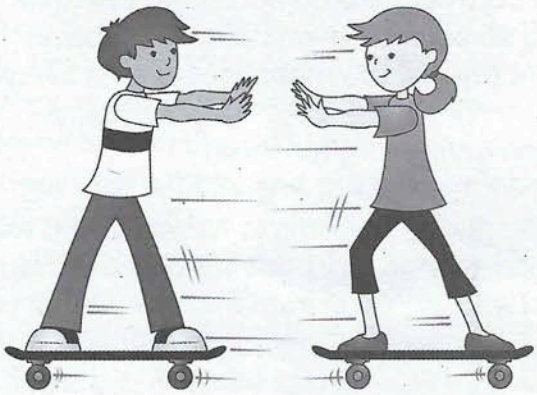
Newton's third law states that when an object is pushed or pulled, the object will push or pull equally in the opposite direction. Newton determined that all forces occur in pairs, within which the two forces are equal in strength as well as opposite in direction.

For example, if a boy stands on a skateboard and pushes a girl on a skateboard, both will move backward. The push of the boy on the girl is called the action force, while the push of the girl (who does not actually push) back on the boy is called the reaction force.

This third law is often summarized by the words "For every action, there is an equal and opposite reaction."



Exercise

1. What is gravity? _____

2. What are two ways gravity is affected? _____

3. What is a balanced force? Give an example. _____

4. What does Newton's first law state? _____

5. Explain the formula in Newton's second law. _____

6. What two forces does Newton's third law explain? How do they work? _____