

Name _____

Forces in Space

Answer Key

1. Yes, Newton's laws of motion apply in space just as they do on Earth.
2. Newton's Third Law applies to an astronaut's movements in space when they push off a surface (action), causing themselves to move in the opposite direction (reaction).
3. Microgravity is a condition in which there is very little gravity, such as in space. It affects astronauts by making them feel weightless as if they are floating.
4. Astronauts use carefully calculated forces to control their movements in space. They push off surfaces or use equipment to change their direction and position.
5. One situation where Newton's laws might apply differently due to changing conditions is underwater, where buoyancy and water resistance can alter how objects move compared to their behavior on land.