

Newton's Third Law: Action-Reaction

Final Assignment Instructions

In this lesson, you have learned about Newton's third law of motion, how it created challenges for astronauts in space, and what scientists and engineers did in response to these challenges. You will now write an essay that shares what you have learned and what you think about it. You will need to review your notes.

- Choose one of the topics below and **write** an essay.
- **Organize** your response so that it includes at least three supporting details that you have learned from the reading passage, videos, and other materials in this lesson.
- **Use** at least three vocabulary words (or a form of the words) as part of your supporting details.

Essay Topics

1. When you hit a baseball with a bat, it may seem like only the bat is producing a force. However, Newton's third law of motion states that things are not so one-sided. The ball produces an equal amount of force back on the bat. Think of an example of another common activity and use it to explain action-reaction. Be sure to describe how the action and reaction occur on the objects in your example.
2. Choose an example of a common activity, such as brushing your teeth. Describe how doing this task on Earth would be different from doing it in space. Be sure to explain the challenges you would face if you had to do this activity in space. Also explain how you might change the equipment or technology you use—or the way that you use it—to help you meet those challenges.

Vocabulary Words

gravity
astronaut
zero gravity
reaction force
counteract