



Science Virtual Learning

**6th Grade Science: Newton's 3rd
Law**

April 16, 2020



Grade/Course

Lesson: April 16, 2020

Objective/Learning Target:

Students will explain Newton's Third Law of Motion



Warm-Up

Q: If you throw a basketball to a friend while you are sitting or standing on a skateboard, what will happen to you when you throw the ball?



Warm-Up **Answer**

Q: If you throw a basketball to a friend while you are sitting or standing on a skateboard, what will happen to you when you throw the ball?

A: You will move backward as the ball moves forward.
(This is because when you exert a force on the ball, the ball exerts a force back on you.)



Key Terms

momentum- a measurement of the amount of motion an object has.

$$\text{momentum} = \text{mass} \times \text{velocity}$$

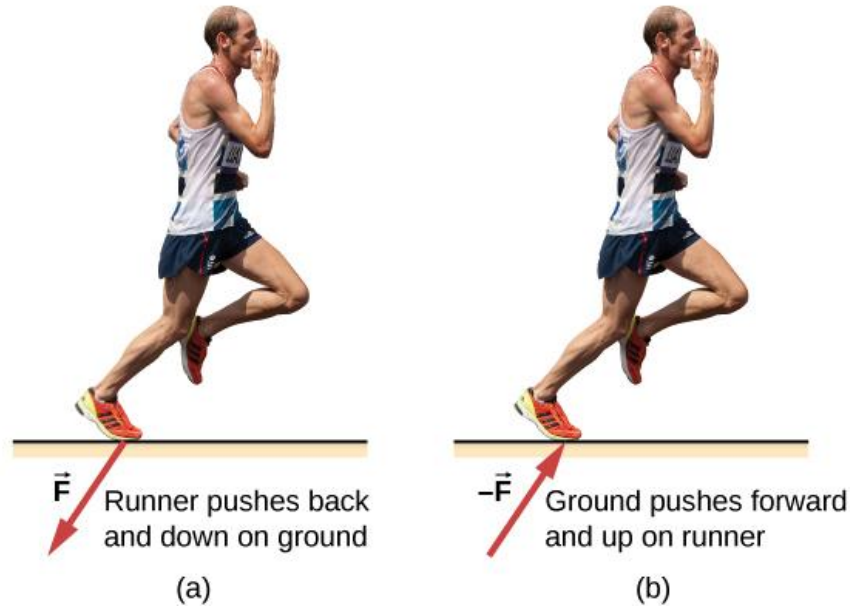


Newton's Third Law of Motion is commonly stated as, **“For every action, there is an equal and opposite reaction.”**

This is why you move backwards if you are on a skateboard while throwing a ball. As you exerted a force (push) on the ball exerted a push back on you.

The Third Law is also called the Law of Momentum

Newton's Third Law of Motion is commonly stated as, **“For every action, there is an equal and opposite reaction.”**



Warm-Up: Watch [The Science of Football \(3rd Law\)](#)
Fill in the blanks in the sentence below.



The momentum of the players is the same before and after they collide. This is called the Law of _____ of _____.

Warm-Up: Watch
[The Science of
Football \(3rd Law\)](#)
Fill in the blanks in
the sentence below

**Answer
Key**



The momentum of the players is the same before and after they collide. This is called the Law of Conservation of Momentum.



Practice 1

1. Watch the Study Jams [video](#).
(Click play video)
2. Answer the 7 questions to test your knowledge.
(Click test yourself)



Practice 2

[Read a short article on the Third Law](#)

[Six Practice Problems](#)

[Short Review of the Third Law of Motion](#)



Additional Practice

1. Watch the Brain Pop [video](#) and take the [quiz](#).
2. Review [Newton's Laws of Motion](#).
3. Check your answers to the [quiz](#) and [review](#).