



Science Virtual Learning

**8th Grade Science**

**Newton's Laws of Motion**

May 7, 2020



## 8th Grade Science

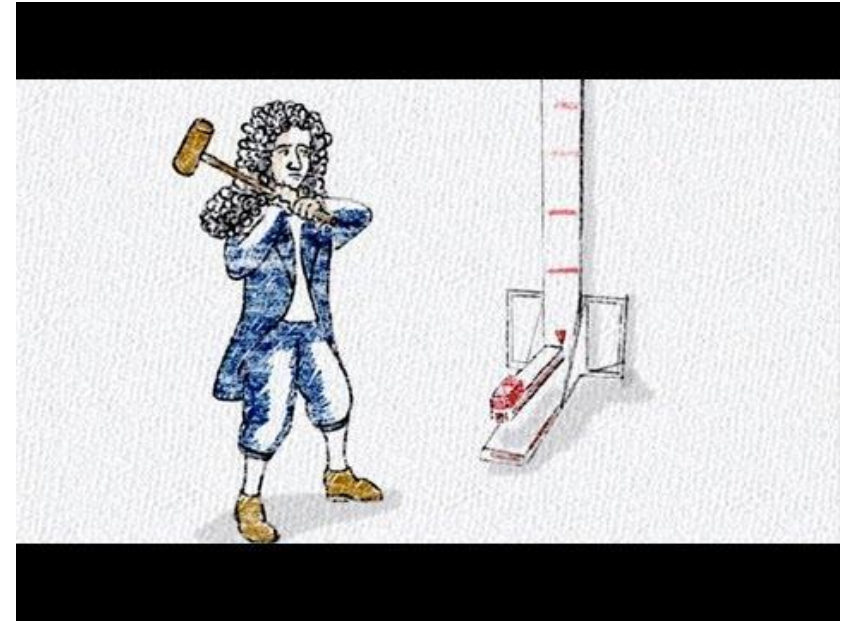
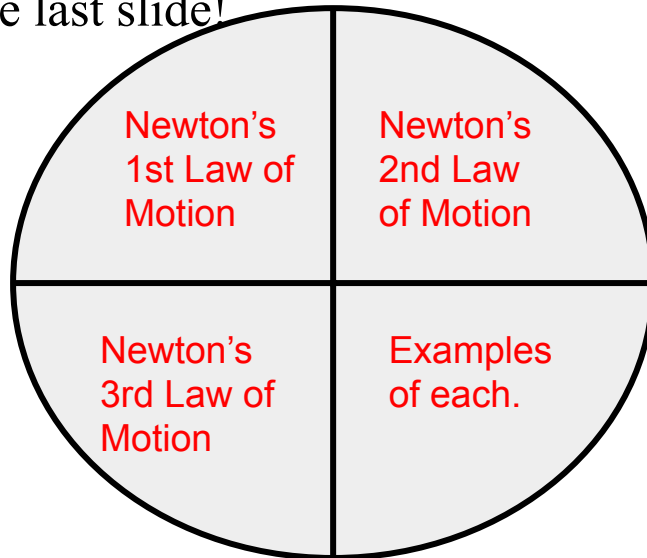
### Lesson: May 7, 2020

### **Objective/Learning Target:**

I can understand and explain Newton's three laws of motion.

# Bellwork

1. Watch this video about Newton's 3 laws of motion.
2. As you watch, make this and answer it on your own paper. Check your answers on the last slide!



## Newton's First Law of Motion

Watch [this video](#).

On a sheet of paper:

Write down Newton's First Law of Motion in your own words on a sheet of paper.

Give an example from the video

Give an example from your own life

# Newton's Second Law of Motion

Watch [this video](#).

On a sheet of paper:

Write down Newton's  
Second Law of Motion  
in your own words on a  
sheet of paper.

Give an example from  
the video

Give an example from  
your own life

## Newton's Third Law of Motion

Watch [this video](#).

On a sheet of paper:

Write down Newton's Third Law of Motion in your own words on a sheet of paper.

Give an example from the video

Give an example from your own life



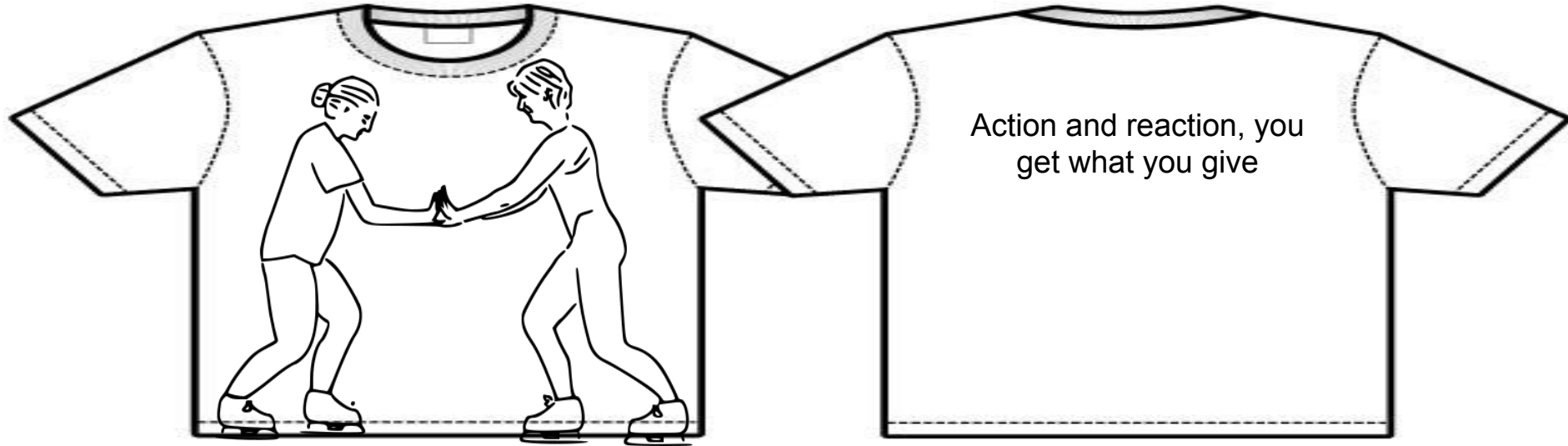
## T-Shirt Design

On a separate sheet of paper you will be designing a t-shirt over one of newton's laws of motion. You can choose any of the 3 you would like.

- On the front you should draw an image that shows the law of motion you chose in action.
- On the back you should come up with a 1 or 2 lined slogan or saying that is related to the law of motion you chose
- Write 3-5 sentences explaining how the picture you drew and saying or slogan you came up with explain the law of motion you chose.

Example on next slide...

## T-Shirt Design



The t-shirt I chose explains the 3rd law of motion because both of the ice skaters are pushing each other equally. Which the 3rd law states for every action there is an equal and opposite reaction so the image fits. It is also known as the “action/reaction” law so the saying on the back shows that as well.



## Review

1. Play this [game](#) over Newton's first and second laws.
2. See how well you know Newton's Laws with [this quiz](#).

# Answers

## 1. Bellwork

- a. Newton's 1st Law- Object at rest stays at rest, object in motion stays in motion
- b. Newton's 2nd Law-  $\text{Force} = \text{Mass} \times \text{Acceleration}$
- c. Newton's 3rd Law- For every action there's an equal and opposite reaction
- d. Examples- 1st: When bicycle is stopped, is always stopped until acted on. 2nd: More force you apply the quicker you accelerate. 3rd: Bouncing a bouncy ball. The ball causes a downward force and the floor causes an upward force.