

Science Virtual Learning

3rd Grade Forces and Motion





3rd Grade Math Lesson: 04/10/20

Learning Target:

I can observe an object's motion in order to collect data and prove that a pattern can be used to predict future motion.

Background:

- Students learn to describe ways to change the motion and direction of an object and amount of force in 2nd grade.
- Students learn how to predict patterns of motions using Newton's Laws of Motions.

Let's Get Started:

Watch Videos:

- 1. Anchor Lesson
- 2. Study Jams- Force and Motion
- 3. Move It! Read Aloud

Practice #1:

If you want your soccer ball to have motion, what do you have to apply to it?

Think back to the study jam video

Sam kicked the ball but didn't make it inside the goal. Mia told him he needed more _____ in order for the ball to have greater **distance.**



If you want the soccer ball to go a greater **distance** you need more of this.

Practice #1:

If you want your soccer ball to have motion, what do you have to apply to it?

Think back to the study jam video

Sam kicked the ball but didn't make it inside the goal. Mia told him he needed more _____ in order for the ball to have greater **distance.**



If you want the soccer ball to go a greater **distance** you need more of this.

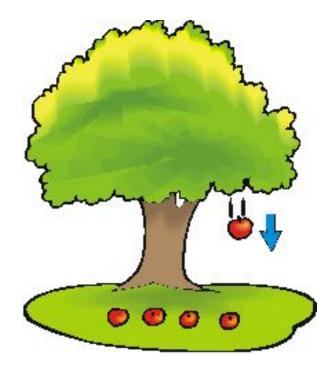
Answer: Force

Practice #2:

Which **force** is causing this apple to fall to the ground?

Think back to the read aloud

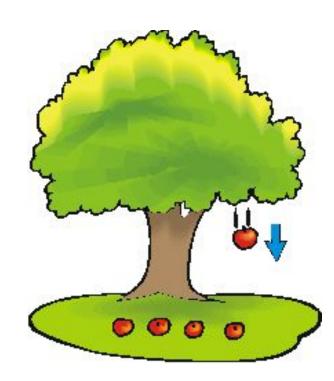
• There is a **force** that always makes things fall back down to Earth. What is this f**orce**?



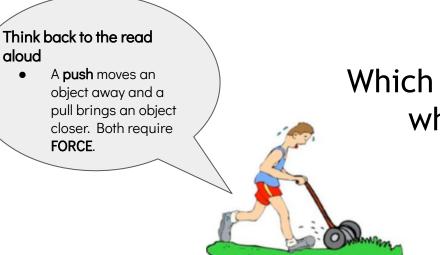
Practice #2: Which **force** is causing this apple to fall to the ground?

Think back to the read aloud

• There is a **force** that always makes things fall back down to Earth. What is this f**orce**?



Answer. Gravity

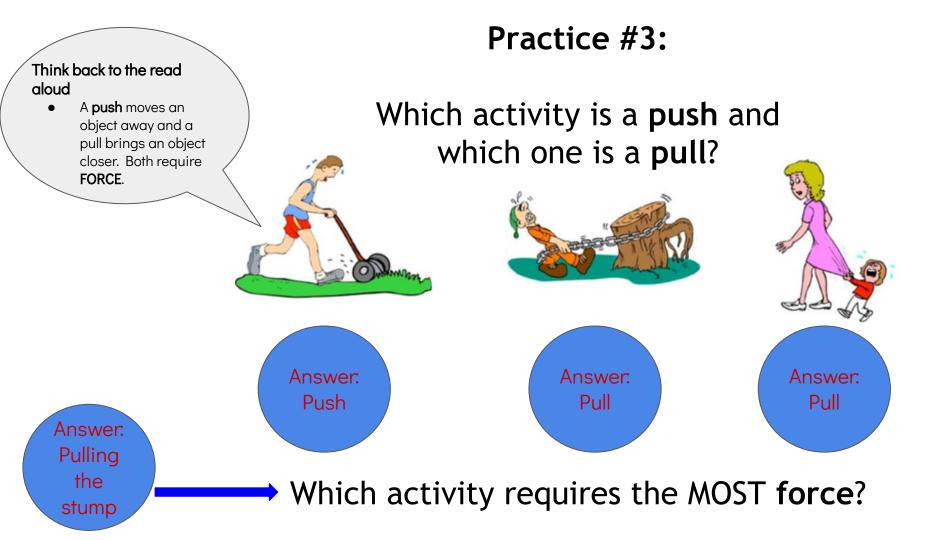


Practice #3:

Which activity is a **push** and which one is a **pull**?

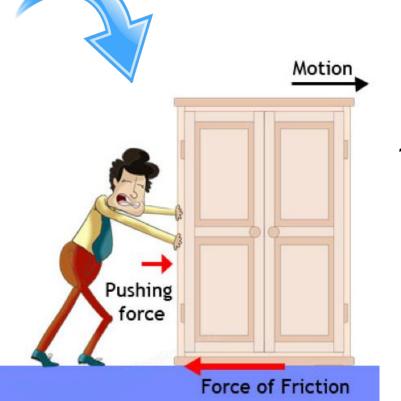






Practice #4:

In the image below you see a man **pushing** a cabinet. **Friction** is working in the opposite **direction** of the **force** he is applying.



Which of these two objects would have the most friction if rolled across your carpeted floor?

) marble

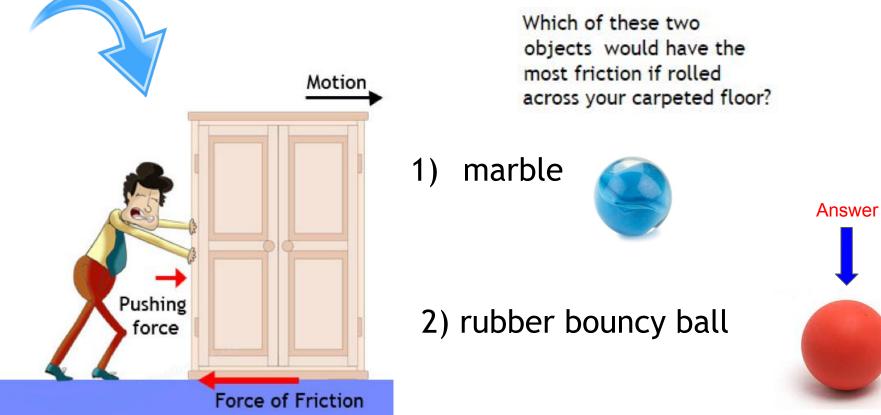


2) rubber bouncy ball



Practice #4:

In the image below you see a man **pushing** a cabinet. **Friction** is working in the opposite **direction** of the **force** he is applying.

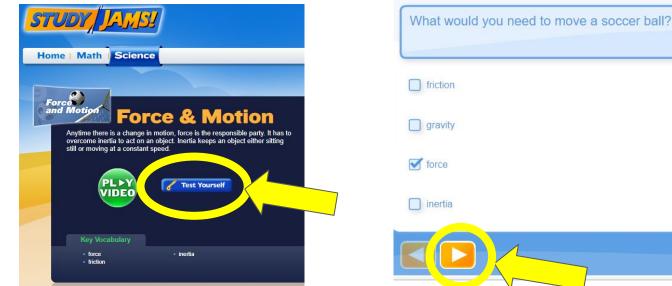


Practice on your own:

Go to this website:

Study Jam: Test Yourself

- 1. If you need to rewatch the study jam video, you may do so.
- 2. Then click on "Test Yourself"
- 3. Read the question, put a checkmark for your answer, and then click the yellow arrow to go to the next question.



MORE Practice on your own: Go to this website: <u>Word-O-Rama</u>

- 1. Select PLAY, then START
- 2. Match each word to its definition





Practice:

Watch these videos and complete this page in your packet.

- 1. Move It! Read Aloud
- 2. Activity- Vocab

After watching the read aloud "Move It! Motion, Forces and You" by Adrienne Mason, find these words in the story to help you identify what they are. Afterwards, choose 5 vocab words, draw a picture, label and describe what they are.

Push Pull Force Motion Distance Direction

Gravity Friction Click here to open worksheet.

Self Check:

- 1. Was this lesson?
 - easy
 - just right
 - hard
- 2. Find an object in your house that you can easily slide. Which one slides the smoothest? Which object has more friction? Tell someone you live with!

