Today is Monday, February 2, 2015.

Warm Up!

What is the rate of acceleration for someone who brakes a bike from 20 mph to 0 mph in 4 seconds?

Lesson Obj

How can we answer an essay question about science concepts?

Today you NEED pencil, paper, lab journal

Jan 30-4:13 PM

Let's look at some samples from Friday and see what you think...

Jan 30-5:05 PM

The bird is moving because it is moving around the tree. The bird is flying faster and slower and that is speed. Velocity is the bird going toward the tree and that's a direction. Acceleration is the bird going faster and slower.

Jan 30-5:08 PM

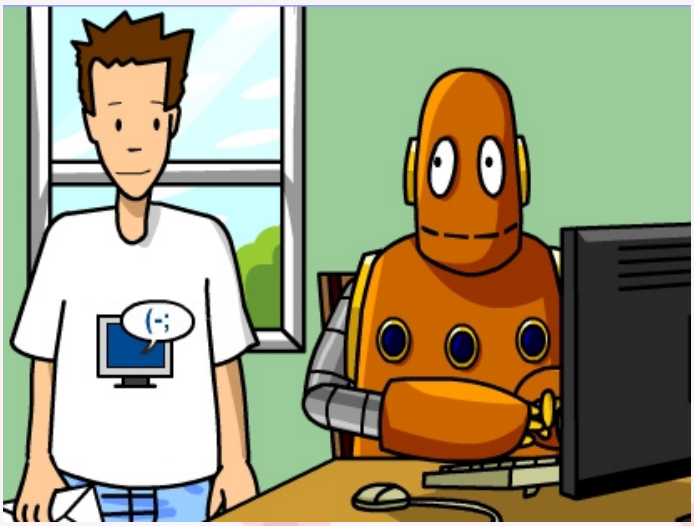
I know the bird is moving because the tree is a reference point. The bird flies a certain distance at a certain time, so there is speed. The bird is flying north, south, east, and west. These directions with speed give the bird velocity. Also, the bird changes velocity and that shows acceleration.

Jan 30-5:11 PM

The bird is in motion because the tree is a reference point and I can see that the bird changes position over time in relation to the tree, which is not in motion. The bird is showing speed because she travels a distance over time.
I could use a stop watch and measure how long it takes her to fly a certain distance from the tree, such as how many meters in a second. The bird's motion demonstrates velocity because she travels at a given speed west, toward the tree. She also flies in a circular pattern, which can be described with acceleration. Her acceleration varies as she changes velocity, a change in direction and/or speed.

Jan 30-5:16 PM

CRITICAL REASONING



Jan 30-5:24 PM

EXIT TICKET!

Describe the motion of the boat using the terms speed, velocity, and acceleration.

Jan 30-5:28 PM

Jan 30-5:48 PM

Today is Tuesday, February 3, 2015.

Warm Up!

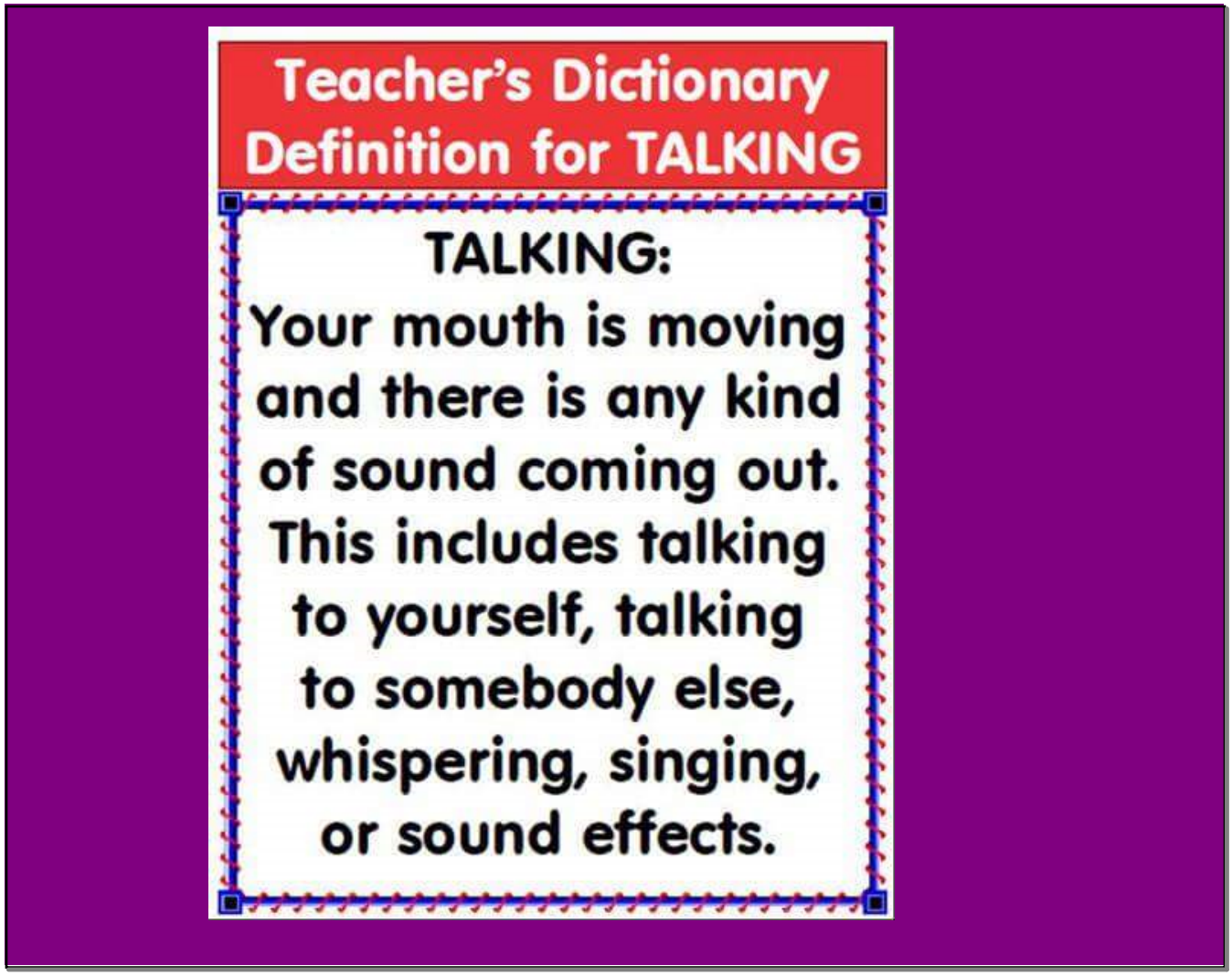
What is the average speed of a truck traveling 350 miles in 8 hours?

Lesson Obj:

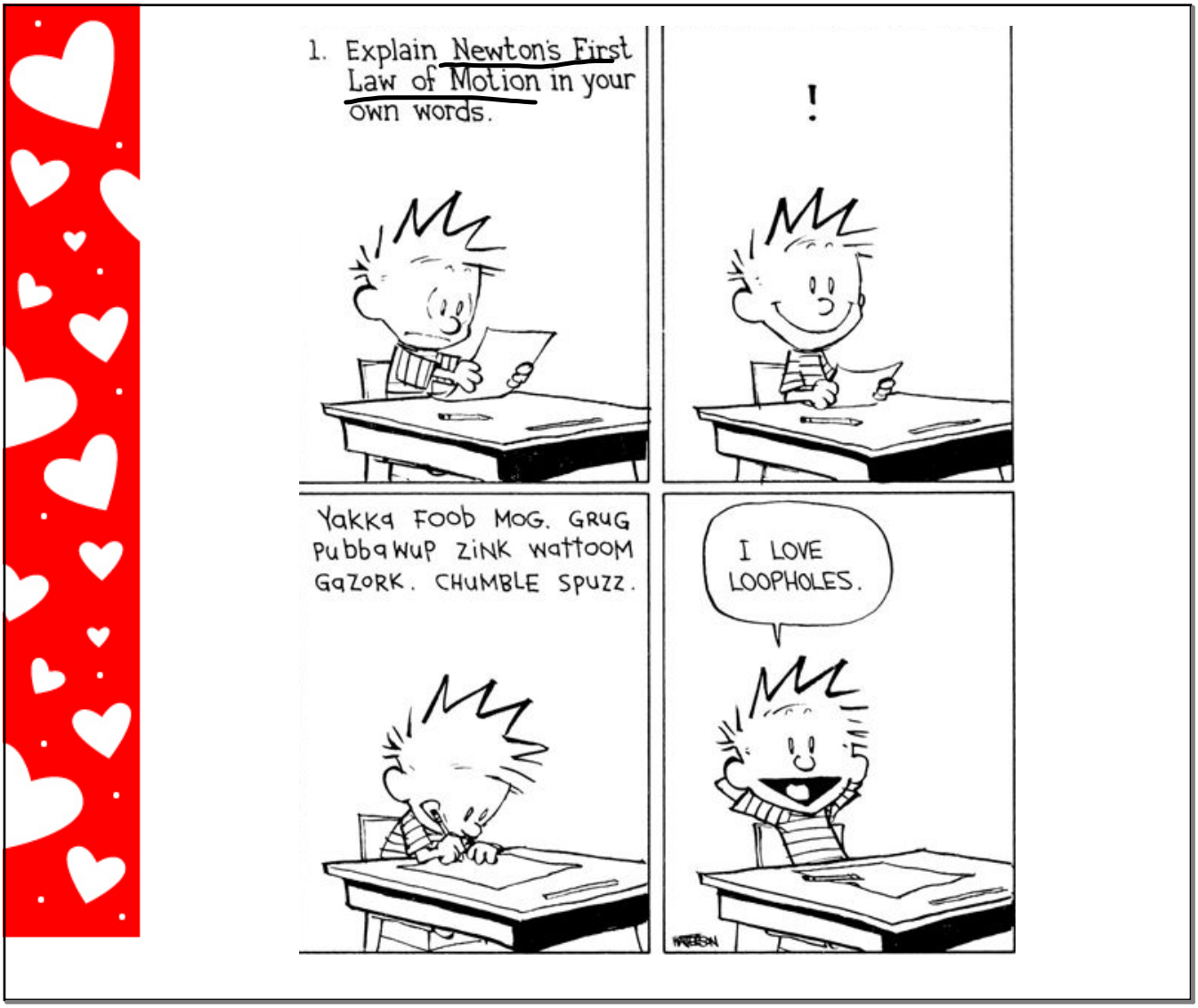
What are Newton's Laws of Motion?

Today you NEED pencil, paper, lab journal

Jan 30-4:13 PM


Teacher's Dictionary Definition for TALKING
TALKING:
Your mouth is moving and there is any kind of sound coming out. This includes talking to yourself, talking to somebody else, whispering, singing, or sound effects.

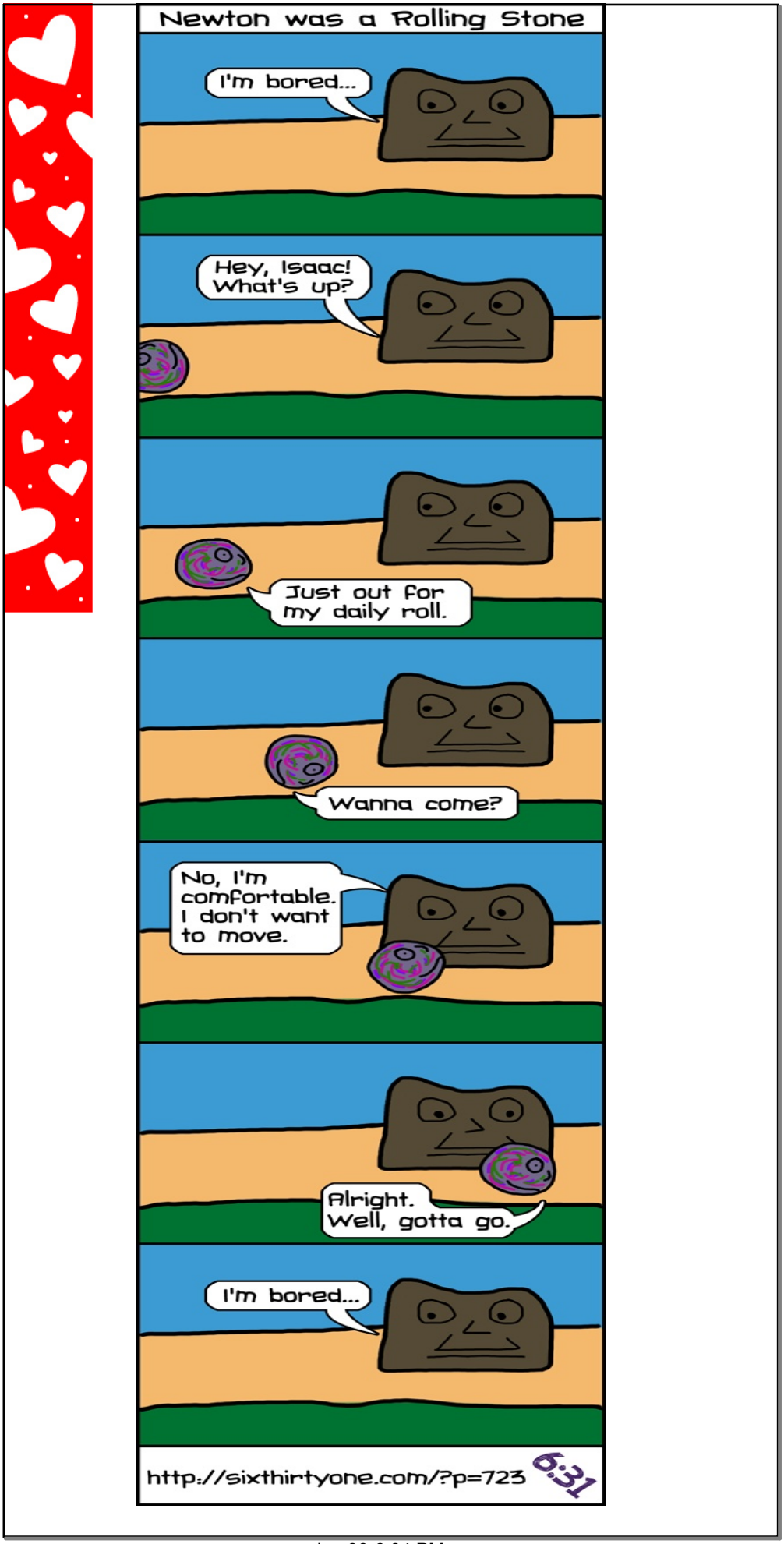
Feb 3-7:46 AM


1. Explain Newton's First Law of Motion in your own words.
!
Yakka foob mog. grug pubbawup zink wattoom gazork. chumble spuzz.
I LOVE LOOPHOLES.

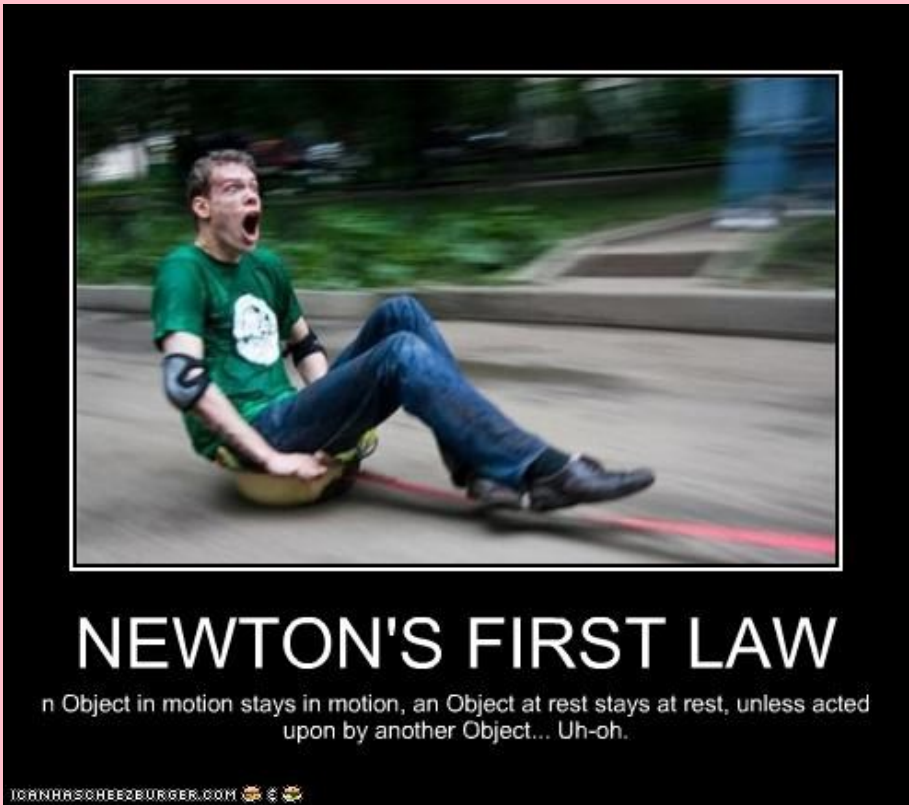
Jan 30-5:50 PM

Newton's first law of motion - a body remains at rest or in motion with a constant velocity unless acted upon by an external force

Jan 30-5:55 PM


Newton was a Rolling Stone
I'm bored...
Hey, Isaac! What's up?
Just out for my daily roll.
Wanna come?
No, I'm comfortable. I don't want to move.
Alright. Well, gotta go.
I'm bored...
http://sixthirtyone.com/?p=723
6.31

Jan 30-6:04 PM


NEWTON'S FIRST LAW
n Object in motion stays in motion, an Object at rest stays at rest, unless acted upon by another Object... Uh-oh.
ICANHASCHEEZBURGER.COM

Jan 30-6:06 PM

Read the selection "Would you Believe . . ." on page 106 of the textbook.


Would You Believe . . . ?

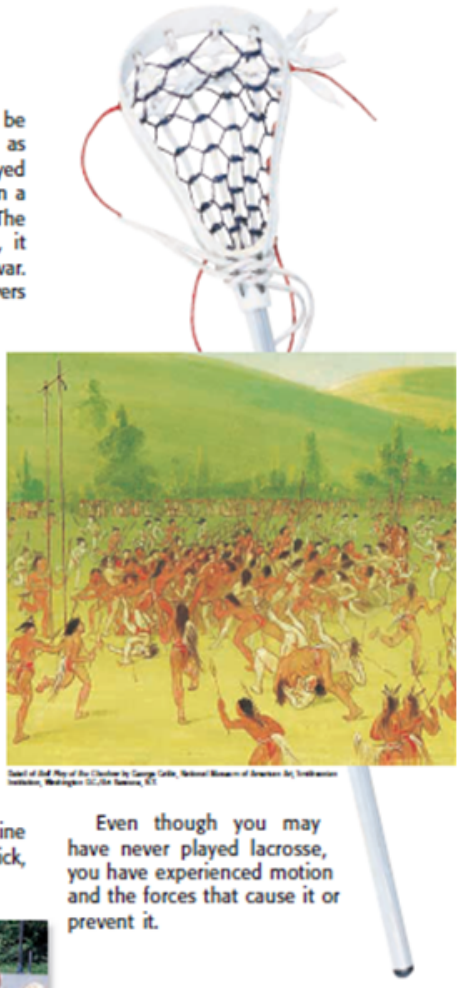
Oct 17-5:33 PM

Would You Believe . . . ?

There was once a game that could be played by as few as 5 or as many as 1,000 players. The game could be played on a small field for a few hours or on a huge tract of land for several days. The game was not just for fun—in fact, it was often used as a substitute for war. One of the few rules was that the players couldn't touch the ball with their hands—they had to use a special stick with webbing on one end. Would you believe that this game is the same as the game of lacrosse played today?

Lacrosse is a game that was originally played by Native Americans, as shown at right. They called the game *baggataway* (bag AT uh way), which means "little brother of war." Although lacrosse has changed and is now played all over the world, it still requires special webbed sticks.

Using a lacrosse stick, a player can throw the ball at speeds well over 100 km/h. In order to move the ball this fast, a large force (push or pull) has to be supplied. Likewise, in order to stop the ball, another large force is needed. Imagine using your bare hand, instead of the stick, to supply this force—Ouch!



Even though you may have never played lacrosse, you have experienced motion and the forces that cause it or prevent it.

Three generations of Native American lacrosse players

Describe the *interactions of force and motion* in a game of lacrosse.

Jan 13-3:00 AM

EXIT TICKET!

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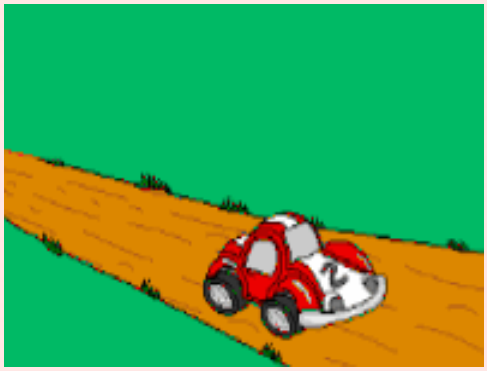


Explain how this car is an example of Newton's first law of motion.

Jan 30-5:28 PM

Jan 31-1:56 PM

Today is Thursday, February 5, 2015.

A basketball bounces across the gym floor and comes to rest. What forces caused it to come to rest?

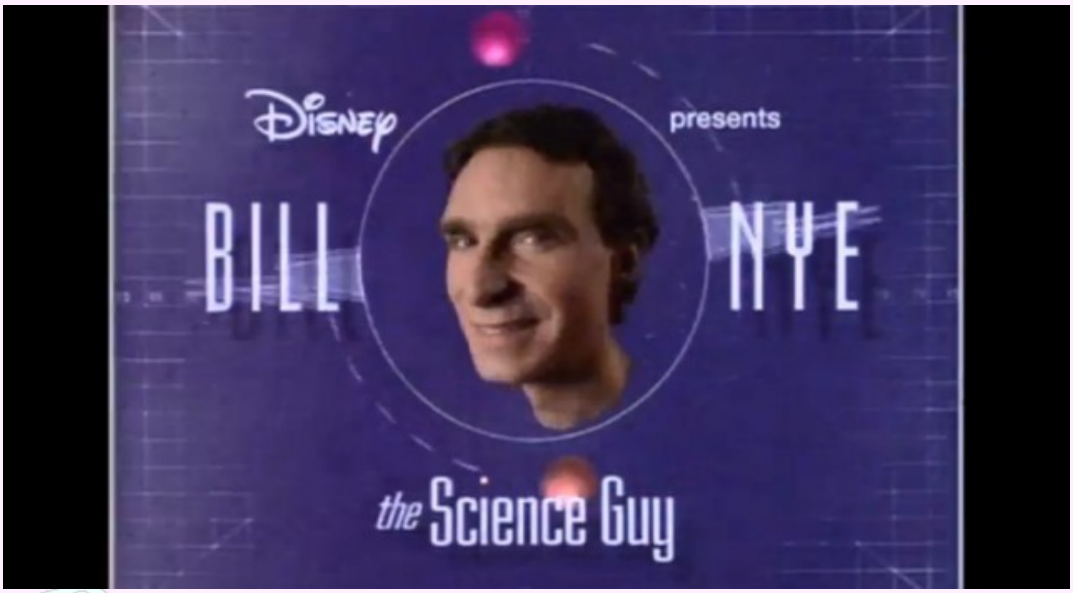
What are Newton's Laws of Motion?

Today you

pencil, paper, lab journal, hand out

Jan 30-4:13 PM

Click below for the video.



Jan 31-1:52 PM

EXIT TICKET!

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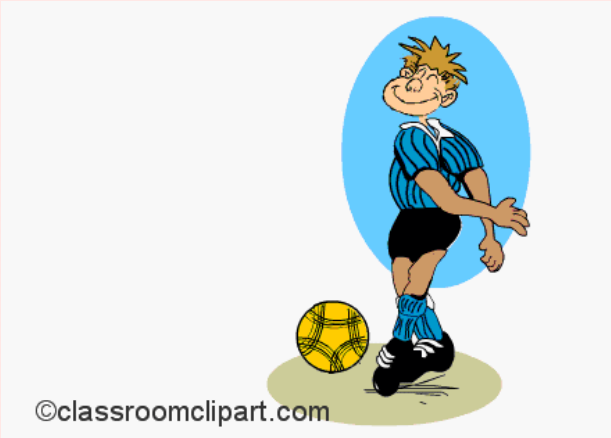
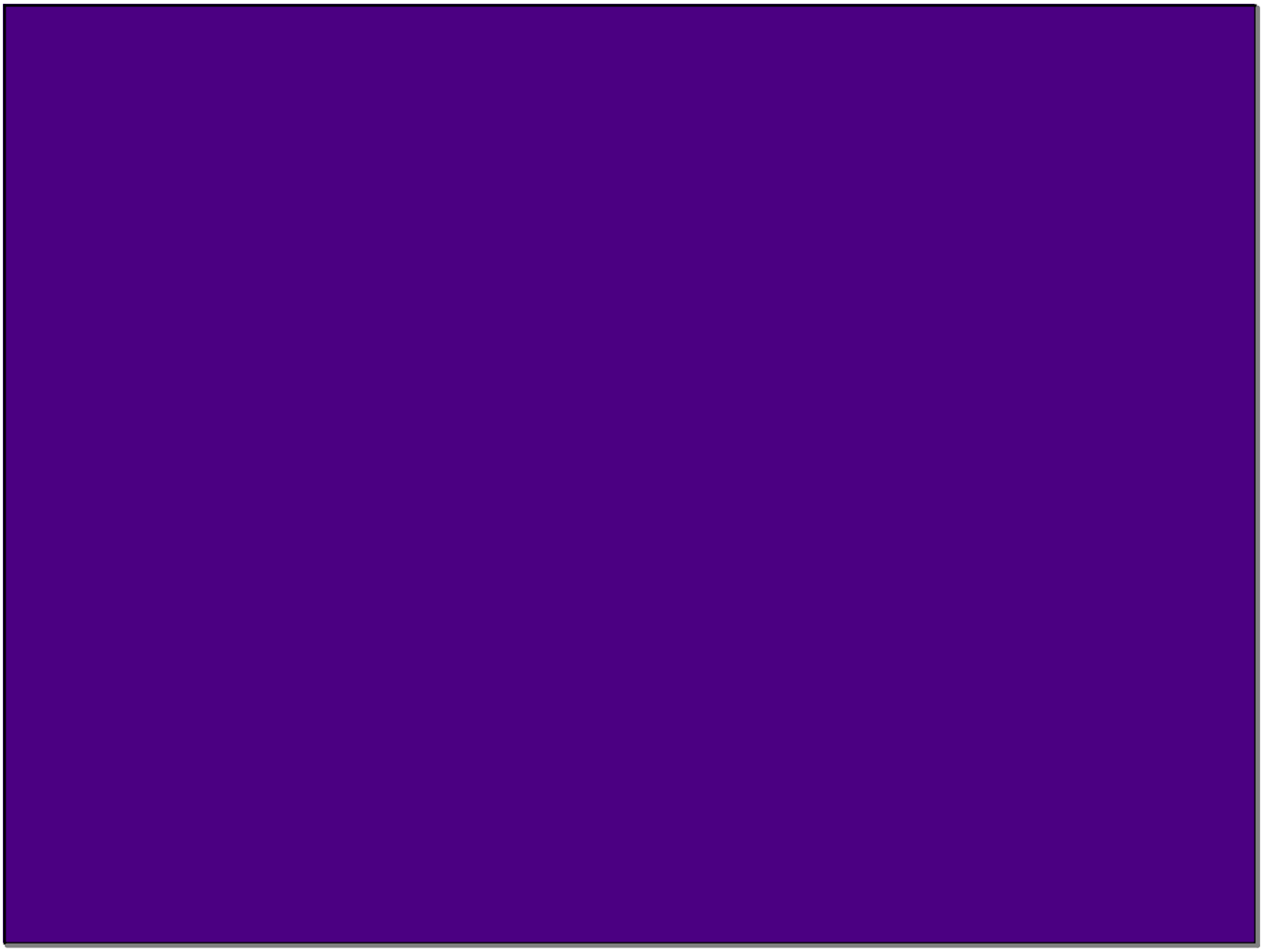


How is the soccer player demonstrating an example of Newton's laws of motion?

Jan 30-5:28 PM



Jan 31-2:04 PM

Today is Friday, February 6, 2015.

Warm Up!

Give a definition for friction in your own words.

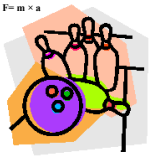
Lesson Obj:

What are Newton's Laws of Motion?

Today you NEED

pencil, paper, lab journal, hand out

Jan 30-4:13 PM

Newton's First Law	An object will stay at rest or in motion unless it is acted upon by a force.	
Newton's Second Law	Force, mass, and acceleration are related. Unbalanced forces acting on an object is equal to the mass of the object times the acceleration.	
Newton's Third Law	For every action, there is an equal or opposite reaction.	

Copy the chart into your lab journal.

Understanding Newton's First Law of Motion

Mass and Inertia

Mass
is the measure of inertia

Inertia
is the ability of an object to resist any change in motion

An object with a large mass has

more inertia

than an object with a small mass.

The greater an object's inertia,

the harder to

change its motion

Jan 28-4:16 PM

Which of the following objects has more inertia?

- bowling ball
- golf ball

Which of the following objects has more inertia?

- apple
- watermelon

The greater the mass the greater the

inertia

_____

Jan 28-4:16 PM

Understanding Newton's Second Law of Motion

Force = Mass x Acceleration

Force
a push or pull

Acceleration
the rate a which velocity changes

Acceleration depends on

mass

An object's acceleration increases as the object's **mass** **decreases**

Acceleration depends on

force

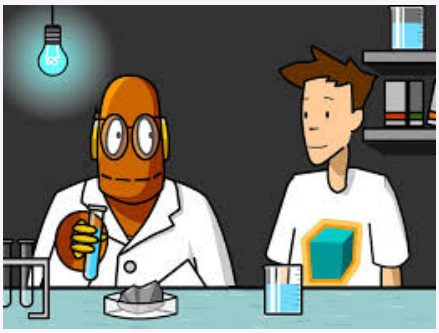
An object's acceleration increases as the **force** on the object increases

Jan 28-4:21 PM

Why do you have to exert a greater amount of force to accelerate a full grocery cart than an empty grocery cart?

Jan 28-4:22 PM

Gravity and Inertia



Force and Newton's Laws of Motion

Jan 31-2:08 PM

EXIT TICKET!

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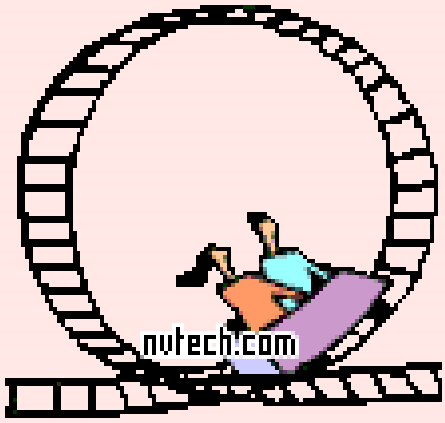


Does the roller coaster follow any of Newton's Laws of Motion? Explain?

BETTER DAYS ARE COMING. THEY ARE CALLED: SATURDAY AND SUNDAY

Jan 30-5:28 PM

New week!

Jan 31-2:04 PM

Today is Monday, February 9, 2015.

What is inertia? Give an example.

What are Newton's Laws of Motion?

Today you

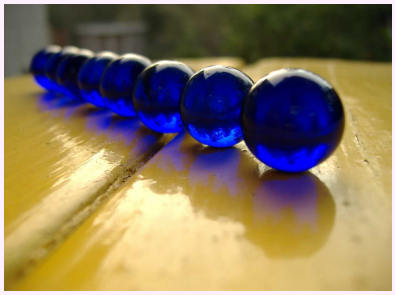
pencil, paper, lab journal, hand out

TEST Friday, 2-13-15!!!!

Motion and Newton's Laws of Motion!

Feb 4-12:02 PM

Try it!



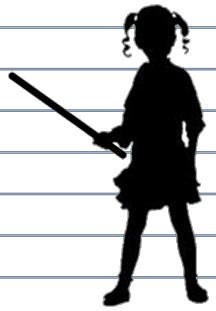
Jan 31-5:41 PM

ACTIVITY:
Investigating
Newton's 1st Law of Motion

mass of orange marble (grams)	mass of blue marble (grams)

Make a prediction

Which marble - orange or blue - will have the most inertia?



State a reason for your prediction.

Aug 27-6:32 PM

OBSERVATIONS

DATA TABLE #1: BLUE MARBLE

TRIALS	DISTANCE (cm)
1	
2	
3	
4	
mean	

DATA TABLE #2: ORANGE MARBLE

TRIALS	DISTANCE (cm)
1	
2	
3	
4	
mean	

CONCLUSION

Revisit Question . . . State a Claim . . . Cite Evidence

Question: What is the relationship between mass and inertia?

Claim:

Evidence:

Aug 27-6:32 PM

EXIT TICKET!

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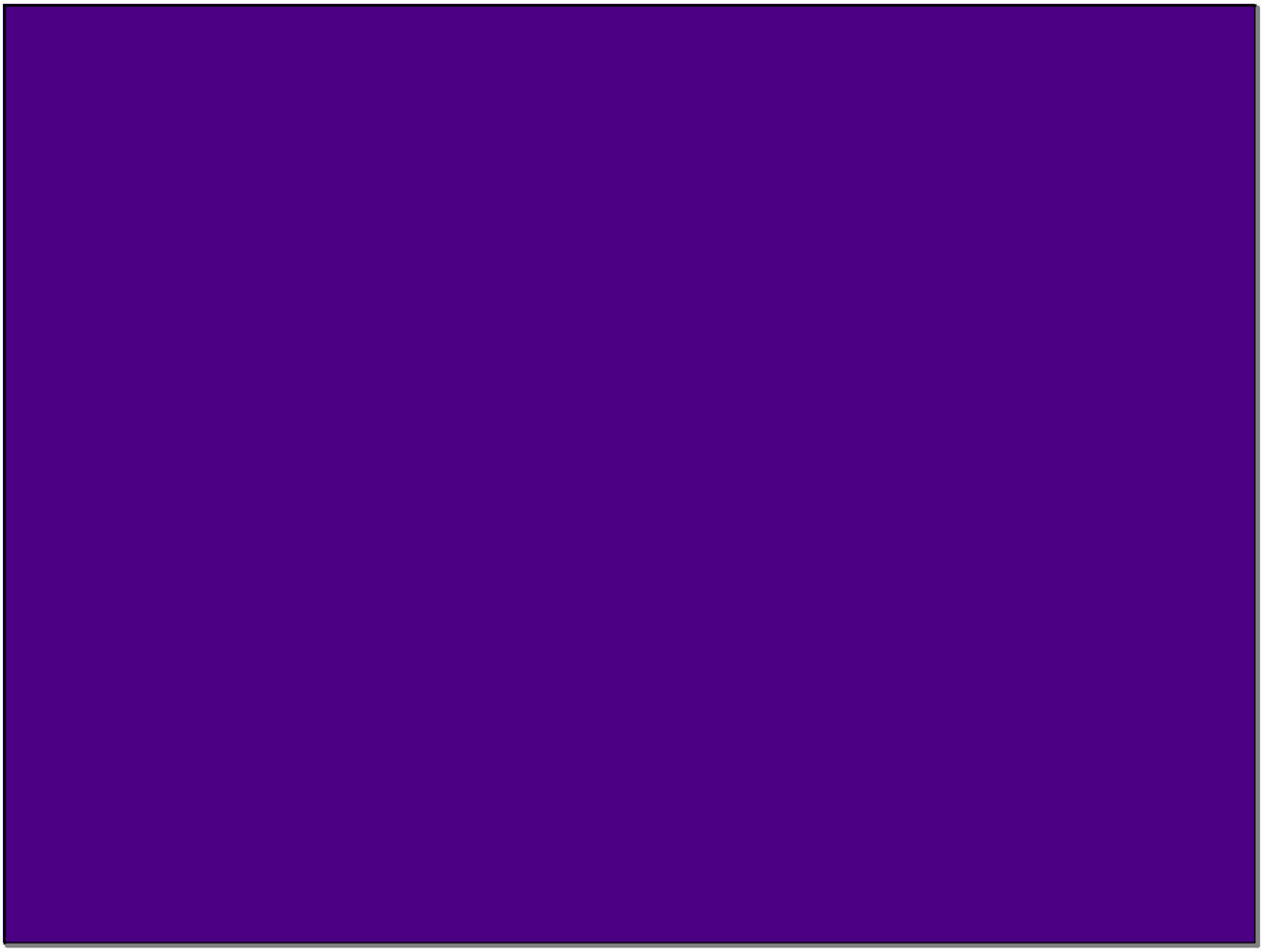
Which of Newton's Laws is used here. Explain.

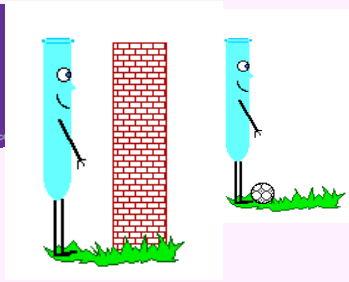
Jan 30-5:28 PM



Jan 31-2:04 PM

Today is Tuesday, February 10, 2015.

Warm Up!



Explain how this demonstrates Newton's second law of motion.

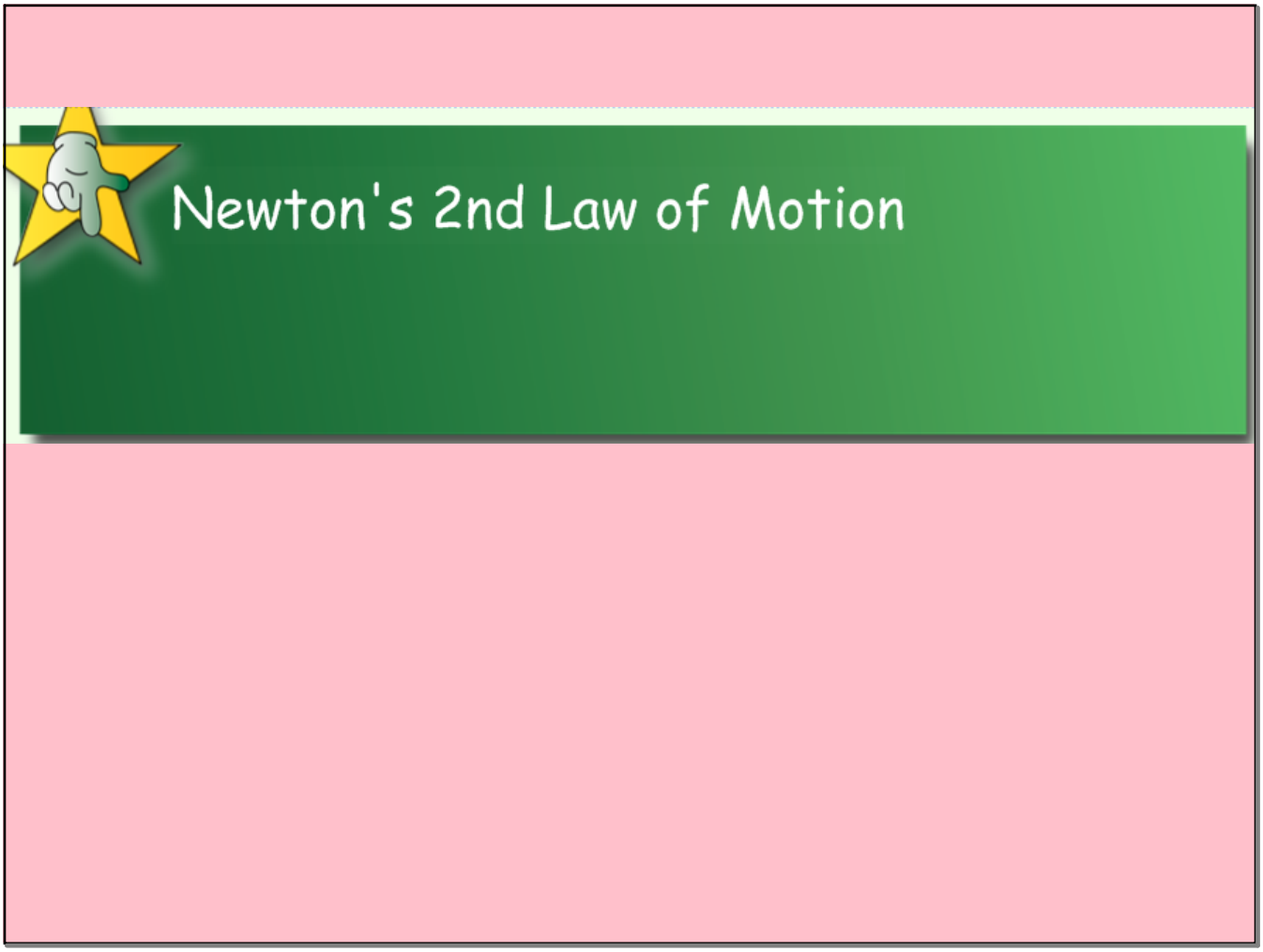
Lesson Obj:

What are Newton's Laws of Motion?

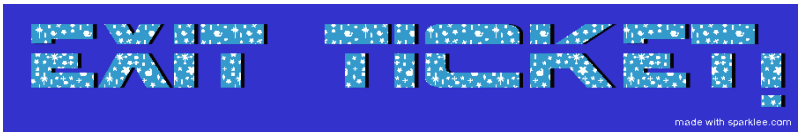
Today you NEED

pencil, paper, lab journal, hand out

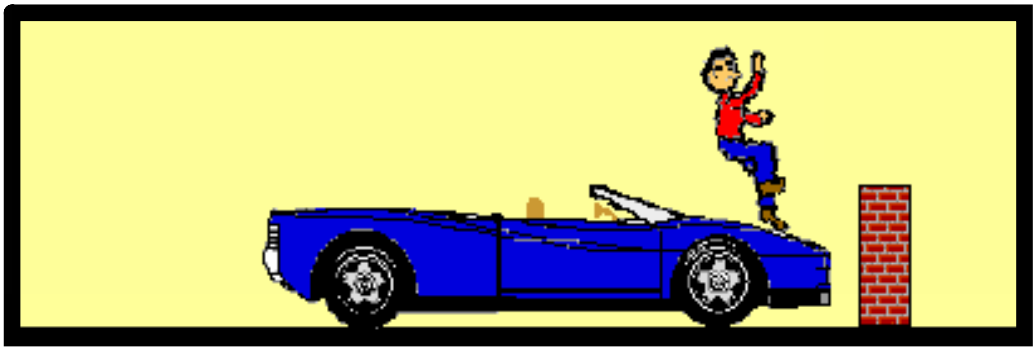
Jan 30-4:13 PM



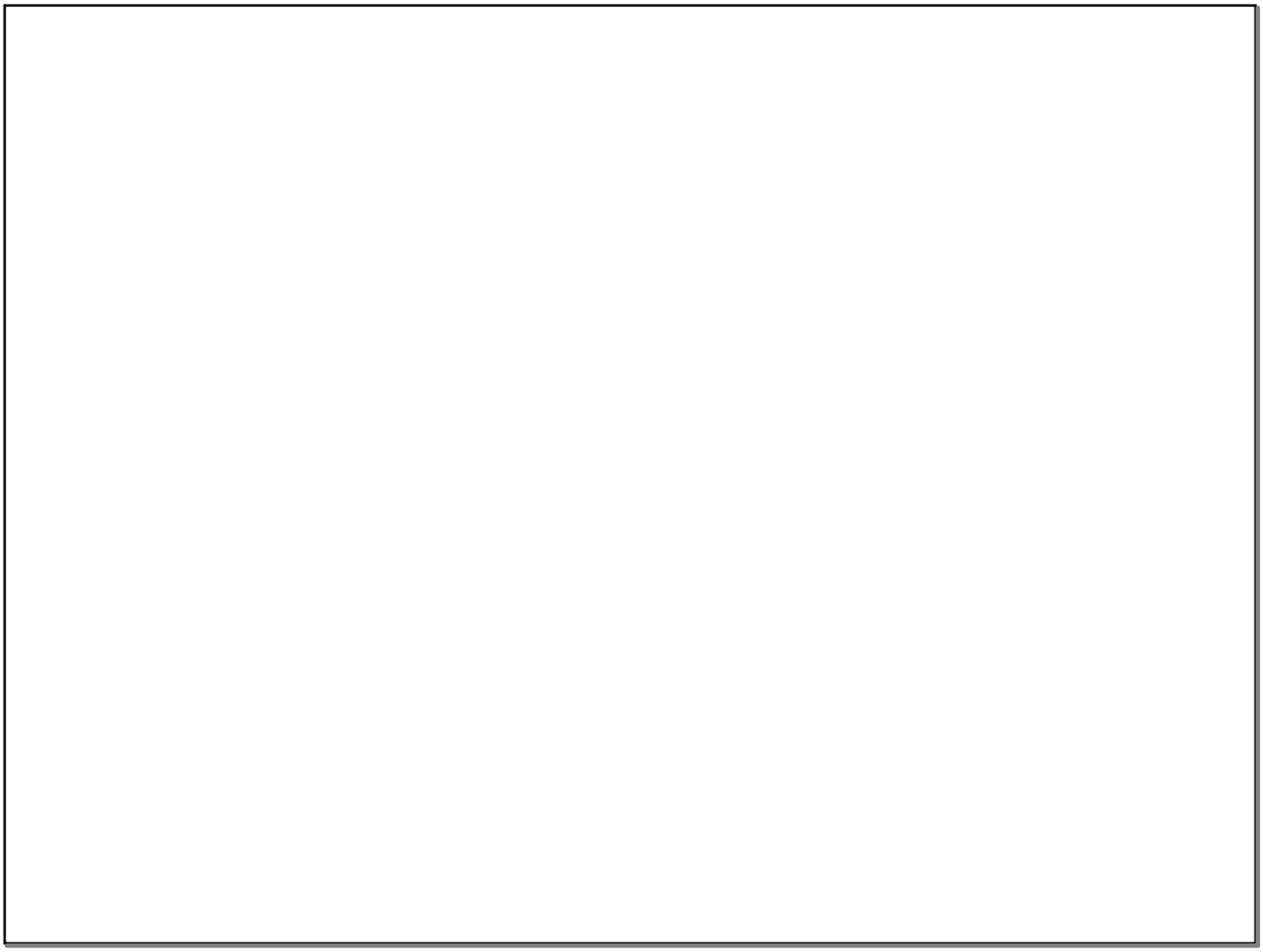
Feb 4-10:16 AM



Use Newton's First Law of Motion to explain why we should wear seat belts.



Oct 10-6:26 PM



Feb 6-10:08 AM