

Newton's Laws Poster
Due Date: _____

Name: _____
Date: _____ Period: _____



Your assignment is to create a poster for one of Newton's Laws of Motion.

You must:

- Choose one of Newton's laws.
- Define the law.
- Provide *at least* one example of that law, with diagrams or pictures.
- Explain how your examples obey Newton's Law.

You will be graded on creativity, design, and neatness of your poster. Please take some time to plan and design your project.

RUBRIC

	Points	Student	Teacher
Law Defined	10		
Appropriate Example(s)	10		
Example(s) Explained	10		
Pictures/Diagrams	10		
Creative/Colorful/Neat (original example)	5		
On time	5		
Total	50		

The following list includes some possible examples for each of the three laws. You may choose examples from this list or think of your own. (Using these examples will sacrifice creativity points)

First Law:

- While riding a skateboard (or wagon or bicycle), you fly forward off the board when hitting a curb, a rock or another object which abruptly halts the motion of the skateboard
- Headrests are placed in cars to prevent whiplash injuries during rear-end collisions
- On any circular ride at an amusement park, you feel like you are being pushed away from the center.
- To dislodge ketchup from the bottom of a ketchup bottle, the bottle is often turned upside down, thrust downward at a high speed and then abruptly halted
- The head of a hammer can be tightened onto the wooden handle by banging the bottom of the handle against a hard surface
- A table cloth can be quickly removed without disrupting the items on the table
- When going around a turn in a car, you are always pushed to outside of the turn (i.e. turn right, you are pushed left)

Second Law:

- Three people can more easily push a car, than one person
- It's easier to move an empty wheelbarrow than one full of bricks
- Getting a push at the top of a sledding hill makes you go faster
- A stronger baseball player can hit a ball farther than a weaker one
- It takes less force to stop an empty truck than a full truck
- An car with no passengers can increase speed faster than a car with 6 passengers

Third Law:

A kayaker's paddle pulls on the water	→	The water pushes back on the paddle and moves the kayak
A Person jumping pushes on the ground	→	The ground pushes on the person
A baseball bat pushes a baseball	→	A baseball pushes on the bat
To open a door you pull on the handle	→	The handle pulls on you
An apple falls from a tree and The Earth pulls the apple	→	The apple pulls on the Earth
If you are wearing socks on a smooth floor and push against the wall	→	The wall pushes on you and you slide back
A sprinter pushes off of the starting block	→	The starting block pushes the sprinter