

Name _____ Per _____ Date _____

Newton's Laws of Motion POSTER

Sir Isaac _____ lived during the 1600s. Like all scientists, he made observations about the world around him. Some of his observations were about _____. His observations have been supported by more data over time; and we now call these *Newton's _____ of Motion*.

★**Newton's first law** of motion says that an object in motion will stay in _____ and an object at rest will stay at _____ unless acted on by an _____ force.

o An object that is not moving remains at rest until something pushes or _____ it.

o This tendency to _____ a change in motion is called _____.

o The more _____ an object has, the _____ its inertia.

★**The second law** of motion states that the force of an object is equal to its _____ times its _____.

o The _____ mass an object has or the more inertia it has, the _____ it is to accelerate.

o More mass means _____ acceleration if the **forces** acting on the objects is the same.

★**Newton's third law** of motion states that for every _____ there is an equal and opposite _____.

o When one object exerts a force on a second object, the second object exerts an _____ force in the _____ direction on the first object.

o The force exerted by the first object is the action _____.

o The force exerted by the second object is the _____ force.

Date Assigned: March _____

Date Due: March _____

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What to do:

1. **Illustrate** an example of **each** of the three laws of motion all on one piece of computer paper.
 2. You need to draw your pictures. You may trace things you find from the internet.
 3. Include an **explanation** of how the illustration **demonstrates or describes** the law of motion. Put the explanation next to the illustration. Do not use a separate sheet of paper for the explanation.
- How you will be evaluated:** This counts as 18 points.

	Expert 5 Points	Skilled 4 Points	Novice 3 Points	Beginner 0-2 Pts
Content and Accuracy 15 pts (5pts each law)	♦ Written information and illustration are accurate and complete ♦ No errors	♦ Written information and illustration are mostly accurate ♦ No major errors	♦ Illustration and written information are partly accurate ♦ Noticeable errors	♦ Written information and illustration are incomplete/ inaccurate. ♦ Major errors
Colored, neatly done 3 pts	1 st Law: Should include following terms in explanation: rest, unbalanced force, inertia			
	2 nd Law: Should include following terms in explanation: force, acceleration, mass			
	3 rd Law: Should include following terms in explanation: action, reaction, opposite, equal			
This page needs to be stapled to your poster. Overall Points_____/18				

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