## Newton's Laws of Motion



## Across

1. Which law does a seat belt counteract?
2. What is the force resisting the motion of solid surfaces, liquid layers and material elements moving against each other?
3. What is mass and acceleration used to calculate?
4. What is the property of matter that measures its resistance to acceleration?
5. $\qquad$ force is the force that is always acting on every object.
6. Newton's first law is also known as the law of $\qquad$ -.
7. Which law says that the acceleration of an object is dependent on the net force on the object and the objects mass?
8. An object with smaller mass accelerates $\qquad$ than an object with less mass.
9. What is the resulting force called when there are forces acting on an object
10. What unit is force measured in?
11. What kind of force is the force going opposite of the action force?

## Down

2. What is the rate of change of an object's velocity?
3. Newton's first law states that an object in rest stays at rest and an object in motion stay in motion unless acted upon by what?
4. In a game of tug-a-war where the blue team has five players pulling and the red team has three players pulling, which team will win?
5. What is it known as when two people push on opposite sides of an object with equal force?
6. Newton's third law states that for every action there is an equal and
$\qquad$ reaction.
7. A rocket launching is an example of which of Newton's laws?
8. Inertia is the resistance of any object to any change in it's state of
9. Mass is a rough measurement of what in an object?
10. Force acting in one direction is what kind of force?
