## Forces-Gravity-Newtons laws



## Across

1. that a particle attracts every other particle in the universe using a force that is directly proportional to the product of their masses and inversely proportional to the square of the distance between them.
2. An object at rest stays at rest and an object in motion stays in motion with the same speed and in the same direction unless acted upon by an unbalanced force.
3. is the sum of all forces acting on an object.
4. A force that opposes the motion of objects that touch as they move past eachother
5. the force of gravity on the object
6. Opposes the motion of an object through a fluid.
7. is the highest velocity attainable by an object as it falls through a fluid
8. A force that opposes the direction of motion of an object as it slides over a surface.

## Down

2. Whenever one object exerts a force on a second object, the second object exerts an equal and opposite force the first object
3. The friction force that acts on rolling objects.
4. The friction force that acts on objects that are not moving.
5. the property of matter that measures its resistance to acceleration.
6. The acceleration of an object is equal to the net force on it divided by the objects mass
7. The product of an objects mass and it's velocity
9 . is the resistance of any physical object to any change in its state of motion
8. A force that acts between any 2 masses.
9. A push or pull that acts on an object.
10. Fluid friction acting on an object moving through the air.
