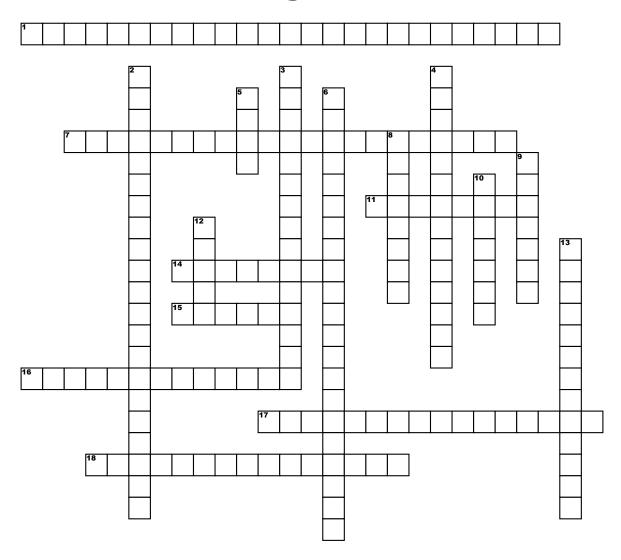
Forces-Gravity-Newtons laws



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.
- 7. 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.
- 11. is the sum of all forces acting on an object.
- 14. A force that opposes the motion of objects that touch as they move past eachother
- **15.** the force of gravity on the object

- **16.** Opposes the motion of an object through a fluid.
- 17. is the highest velocity attainable by an object as it falls through a fluid
- **18.** A force that opposes the direction of motion of an object as it slides over a surface.

<u>Down</u>

- 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
- 8. 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
- **10.** A force that acts between any 2 masses.
- **12.** A push or pull that acts on an object.
- 13. Fluid friction acting on an object moving through the air.