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# Physics Crossword Puzzle 



## Across

1. a law stating that the intensity of an effect such as illumination or gravitational force changes in inverse proportion to the square of the distance from the source
2. the physical property of matter that causes it to experience a force when placed in an electromagnetic field
3. the force exerted on the mass of a body by a gravitational field
4. the alternate rising and falling of the sea, usually twice in each lunar day at a particular place, due to the attraction of the moon and sun
5. the quantity of matter that a body contains, as measured by its acceleration under a given force or by the force exerted on it by a gravitational field
6. the property of matter and radiation that is manifest as a capacity to perform work
7. the speed of something in a given direction
8. a substance or device that does not readily conduct electricity
9. a material or device that conducts or transmits heat, electricity, or sound, especially when regarded in terms of its capacity to do this 20. a state in which a process and its reverse are occurring at equal rates so that no overall change is taking place
10. a vector field that describes a non-contact force acting on a particle at various positions in space
11. the region of space surrounding a body in which another body experiences a force of gravitational attraction
12. a region around a charged particle or object within which a force would be exerted on other charged particles or objects

## Down

2. results in a transfer of electrons between the two objects that are rubbed together 3. both objects acquire the same type of charge. If a negative object is used to charge a neutral object, then both objects become charged negatively
3. a charged object is brought near but not touched to a neutral conducting object. The presence of a charged object near a neutral conductor will force (or induce) electrons within the conductor to move
4. a force that attracts any objects with mass
5. a measure of the resisting power of a specified material to the flow of an electric current 7. the rate of change of velocity per unit of time
6. a force that acts on a body moving in a circular path and is directed toward the center around which the body is moving
7. the action of restricting the vibrations of a transverse wave, especially light, wholly or partially to one direction
8. the rate at which someone or something is able to move or operate
9. a flow of electric charge
10. an electromotive force or potential difference expressed in volts
