**Definition**

**Vocabulary Word**

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| conductor | **CHAPTER 9** |
| Static charge | an electric charge that builds up because of an imbalance between the number of electrons (negative charges) and protons (positive charges) |
| Discharge | to remove all excess static electric charge so that the object is neutral |
| Electrostatics | the study of static electric charge |
| Law of electric charges | the law that states that opposite electric charges attract, and like electric charges repel |
| Induced charge separation | a slight shift in the position of electrons |
| Charging by friction | transferring an electric charge from one object to another by a rubbing action |
| Charging by conduction | transferring an electric charge from one object to another by touching the objects together (direct contact) |
| Charging by induction | transferring an electric charge from one object to anotherby bringing a charged object close to, without touching, another object(no direct contact) |
| Insulator | a material in which the electrons are bound tightly to the nucleus andare not free to move to a neighbouring atom; plastic is a good insulator |
| Conductor | a material in which the electrons are free to travel to a neighbouringatom; metals are good conductors |
| Ground | a connection of an object to Earth through a conductor |
| Van de Graaff generator | a type of static electricity generator that separateslarge amounts of charge; used to research and demonstrate static electricity |
| Electric force | the force exerted on an object with an electric charge; can be aforce of attraction or a force of repulsion |
| Coulomb`s law | the law that states the relationship between electric force, size ofcharge, and distance; the strength of the electric force increases withincreasing electric charges and decreases with increasing distance |
| Coulomb (C) | a measurement of the quantity of electrical charge; theamount of electricity transported by a current of one ampere flowing for onesecond; one coulomb of charge is equal to 6.28 × 10-18 electrons |
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