

23<sup>rd</sup> November.

Ex 1.

- 1) The French scientist Charles Francois de Cisternay Du Fay was the first to make clear the two different types of electric charge positive and negative.
- 2) His famous kite experiment proved that the atmospheric electricity that causes the phenomena of lightning and thunder is identical with the electrostatic charge on a Leyden jar.
- 3) Priestly also demonstrated that electric charge distributes itself uniformly over the surface of a hollow metal sphere and that no charge and no electric field of force exists within such a sphere.
- 4) The Italian physicists conducted the first important experiments in electrical currents.
- 5) Faraday, who made many contributions to the study of electricity in the early 19<sup>th</sup> century.
- 6) About 1840 James Prescott and German scientists demonstrated that electric circuits the law of the conservation of energy and that electricity is a form of energy.
- 7) The Dutch physicist Lorentz first advanced ~~the~~ the electron theory which is the basic of modern electrical theory in 1892.
- 8) The widespread use of electricity as a source of power is largely due to the work of such pioneering American engineers and inventors as Thomas Alva Edison, Nikola Tesla.



following algebraic equation.

6) When an electric current passes through a wire, the temperature of the wire rises.

7) When the electrons of the current collide with the atoms of the conductor, energy is generated.

8) The compass needle located next to the wire will deviate in the direction perpendicular to the wire.