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1. Newton's second law of motion ~~states that the acceleration~~ ~~describes~~ the magnitude and direction of the acceleration of an electron being shot horizontally into a closed space with a uniform field being directed upward.

Therefore, on entering the field, there is a vertical downward force acting on the electron. This is because electric force acts in the opposite direction as the electric field and the electric force acts in the opposite direction, as the electric field and the electric field ~~and the electric field~~ is directed upward.

The magnitude of the force is given by ($F = Eq$), where E is the electric field strenght and q is the ~~energy~~ average of the electric. No force acts horizontally. Hence, the magnitude of acceleration is gitten using newton 2nd law

$F = ma$ where m = mass, F = force, a = acceleration

$$a = \frac{F}{m} = \frac{Eq}{m}$$

$$= \quad a = Eq/m$$

The direction of a is downward just like the way forces F is directed because according to Newton's 2nd law, force is directly proposional to acceleration.

2. Electric field is the region around a charge in which another charge can experience electric force. If the text charge is positive, the direction of electric field and electric force are the same. when the test charge is negative, the direction of ~~is~~ opposite. Electricfield is not a single vector quanties associated with each point in space, this is called the vector field.

Therefore, x an electric field exist within a conductivity

of the field exist a force in every charge in the conductor, causing the free charges to move. this explains the theory of electric current flow.

Electric current is the flow of electric charge.

$\vec{E} = \frac{\vec{F}}{q}$, where $\vec{E}$ = electric field
F = force
q = charge