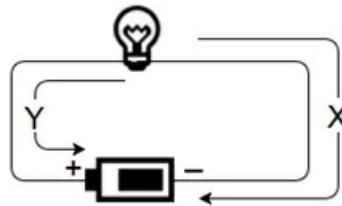


Electric charge and current

The direction of flow of conventional current is from the positive terminal to the negative terminal of the battery through an external circuit. Inside the cell, current flows from the negative to the positive terminal. However, electrons move in the opposite direction. Protons are positively charged and are present in the nucleus of the atom. They do not move at all. Electrons are negatively charged and are present outside the nucleus. Electrons move from low potential (negative terminal) to high potential (positive terminal)



X : Direction of the flow of current

Y : Direction of the flow of electrons

Static charge: An imbalance of electric charges on the surface or within an object is called static charge. One of the reasons for the static charge is rubbing. When we rub a glass rod with silk it becomes positively charged as electrons are transferred to silk. Similarly, when a balloon is rubbed with wool electrons are transferred from wool to balloon. Oppositely charged objects attract each other. Static charge is neutralized by discharge or transfer of charge (current).