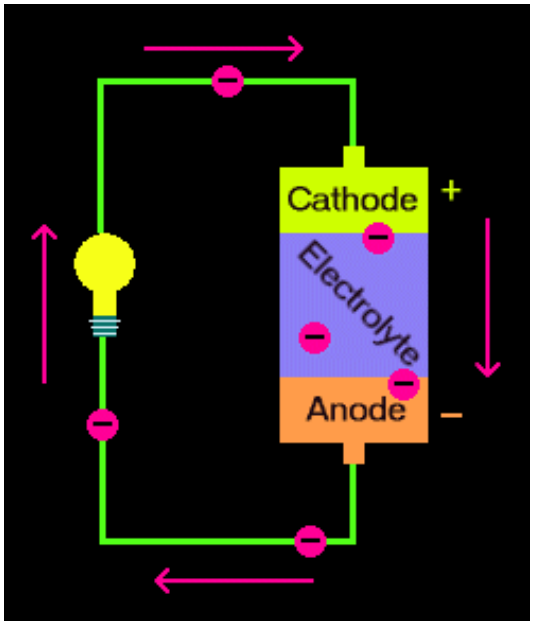
Answer on Question 52090, Physics, Electric Circuits

Question:

How does the potential difference is created by a battery?

Answer:

There are three main components of a battery: two terminals made of different chemicals (typically metals), a positive terminal (cathode) and a negative terminal (anode) and the electrolyte, which separates these terminals. The electrolyte is a chemical medium that allows the flow of electrical charge between the cathode and anode.



When a light bulb or an electric circuit is connected to a battery, chemical reactions occur on the electrodes that create the potential difference between the cathode and anode and, as a result, a flow of electrical energy to the bulb as we can see in the picture. Thus, inside the battery electrons are pushed by the chemical reaction from the negative terminal up to the positive terminal creating a potential difference.