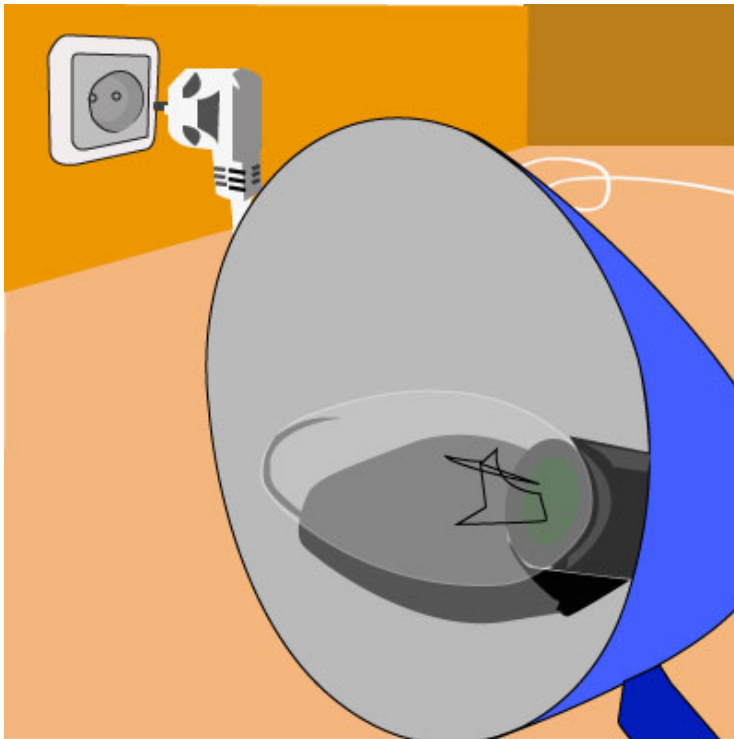




A electrical network consists of electric energy sources (for example batteries), cables to pipeline the electricity and consumers of the electrical energy. This sounds more complicated, than it is. In this moment your are using a computer. This computer need electricity to work. It consumed electrical energy. The electrical energy has to be provided by something. In your case it is the electricity provider, which provides all the sockets in your room with electricity. This is your energy source. Now you have a consumer of electrical energy (your computer) and a energy source (the sockets), which can supply your computer. Just with these elements, the computer will not work. Your have to pipeline the electricity to your computer. Therefore you are using cables. If you are using a Notebook or mobile phone the electrical network is placed inside your device by using the battery as energy source.

Do you remember how many holes your sockets have? Every socket has a least two holes. This fact is a hint for the next necessary characteristic of a electrical network. The simplest electrical network is a loop. Electricity need at least a loop to stream. Providing electrical devices with energy is like making a mill wheel turn. The water has to stream in order to make the mill wheel turn and in order to use the energy of the turning mill for grinding. A electric networks works almost the same.

One hole or pole of the socket provides a lot of electricity and the the other one none. If you connect both, the electricity will stream, like water. But now we insert a electrical device (computer, lamp, toaster etc.) to use the energy of the streaming electricity.

This is a simple model to explain electricity. Please mention that it is a model, which is created to simplify complex effect, in order to make them imaginable.