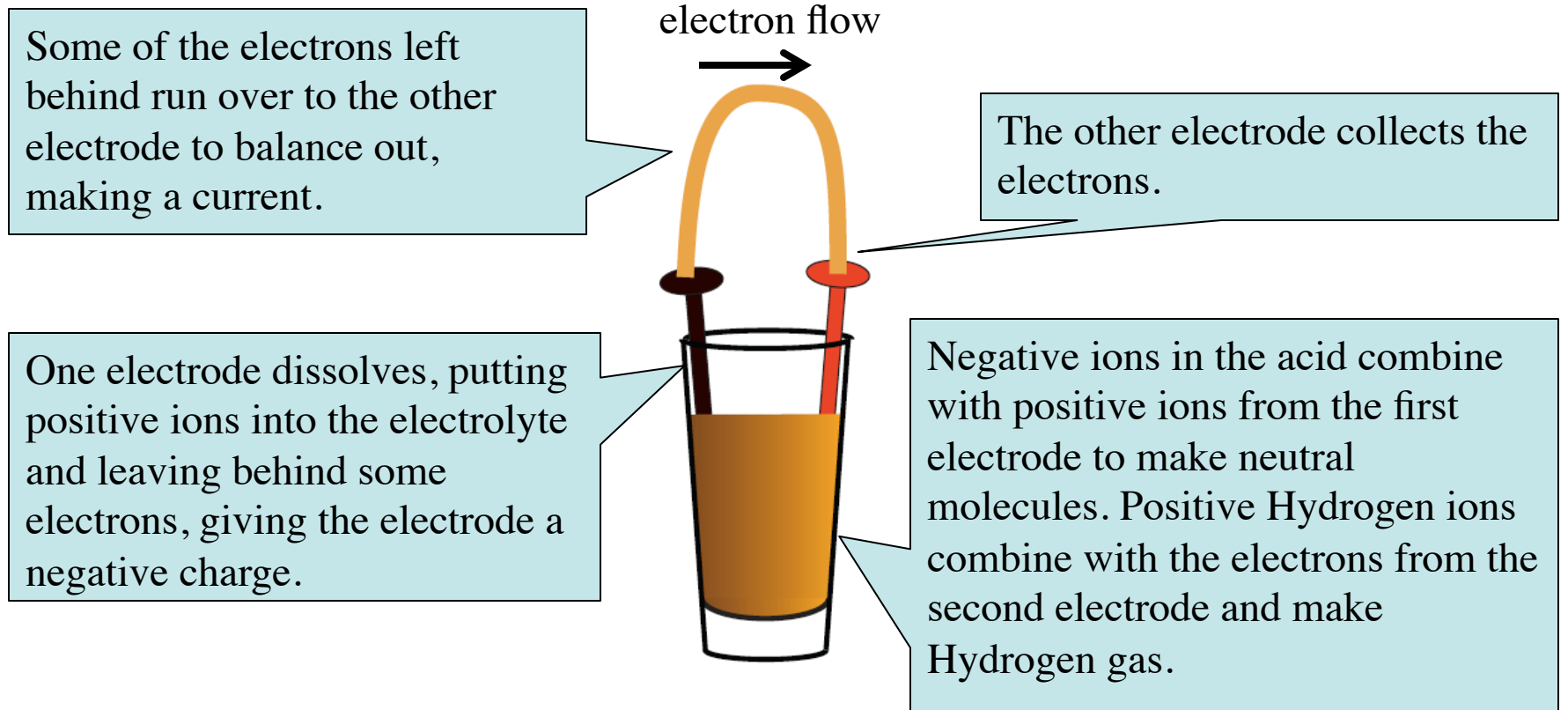
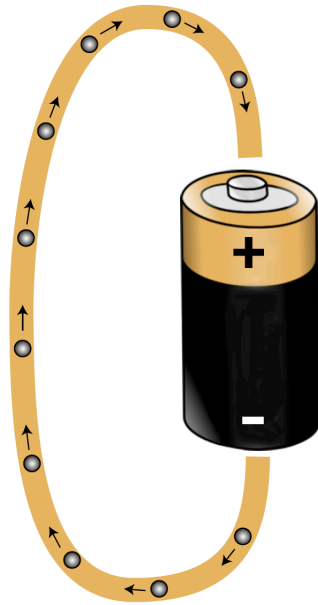


A battery uses two different metals (for the two *electrodes*) and an *electrolyte* (usually an acid).

A Simple Battery



Voltage & Current

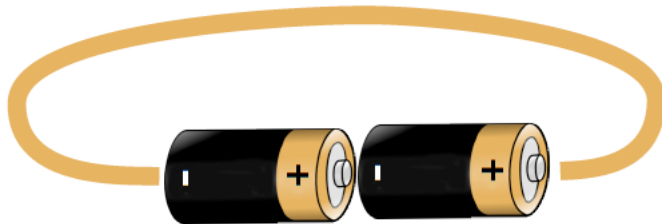


When we connect a wire to a battery, electrons flow around the circuit. The *current* describes how many electrons flow through the wire per second. (This depends on what the battery is connected to.)



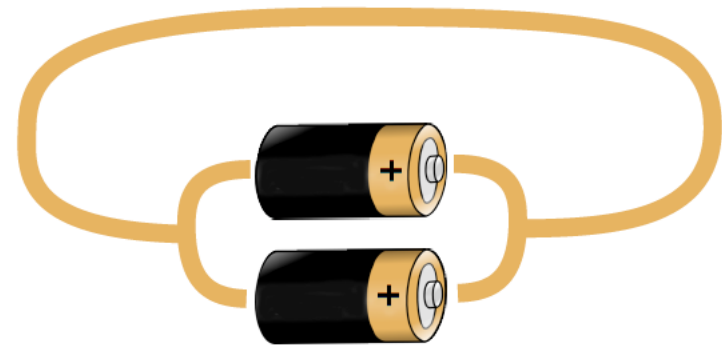
A battery pushes electrons out one side and takes them in at the other, until it can't push any more. The *voltage* describes how hard it can push (or how much energy the electron gets from the push).

Series and Parallel



Series

Put one battery after the other.
Each electron is pushed twice as hard and gets twice the energy.
Twice the voltage!



Parallel

Put one battery next to the other if you need to supply more electrons to go through the circuit.
Twice the available current!