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Understanding *Series & Parallel* Electric Circuits with *Solar Cells*

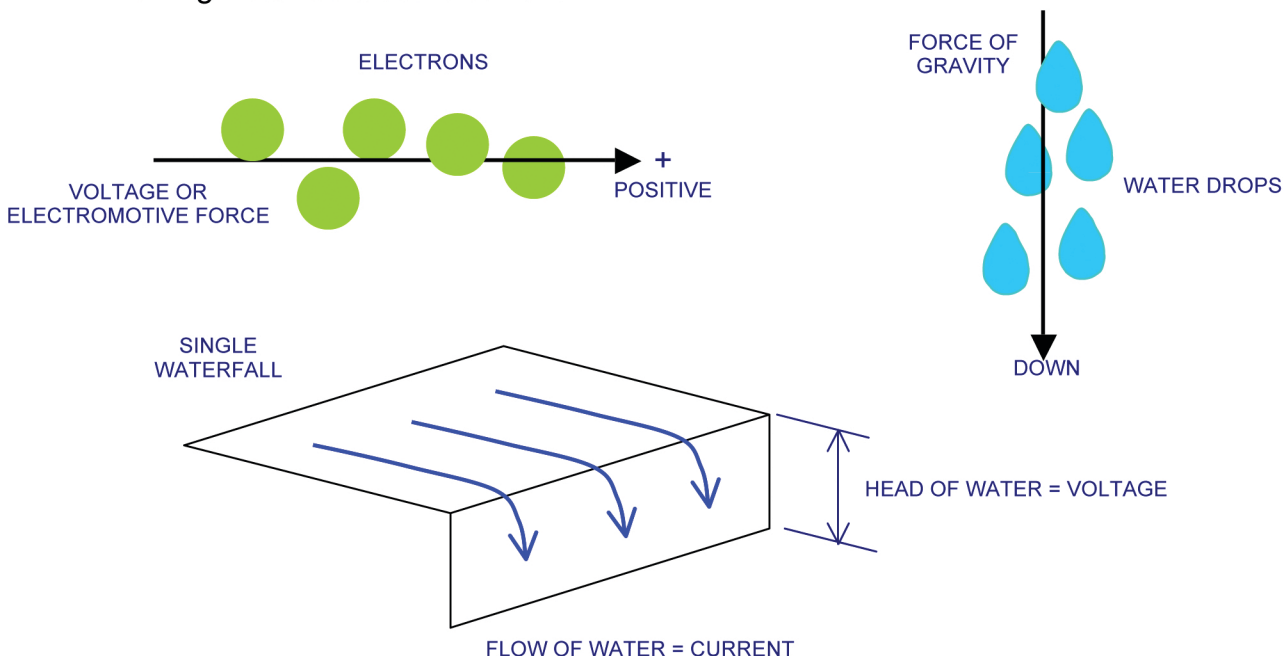
Look at a waterfall to help understand how the way cells are connected affects the electric current [measured in amps] and voltage they produce.

Gravity produces force on a mass such as a water drop. Individual drops of water are forced to flow down the waterfall by gravity. All the flowing water drops make a current of water.

Voltage (also known as electromotive force) produces a force on electric charges such as electrons. Electrons are forced to flow through the PV cell by a voltage created in the cell. All the flowing electrons make an electric current.

Think of:

- water drops as electrons
- the force of gravity as voltage
- flowing water as electric current



If we connect identical waterfalls in series and parallel it can help us see what happens when identical cells are connected in different ways.