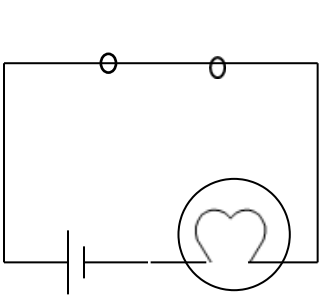


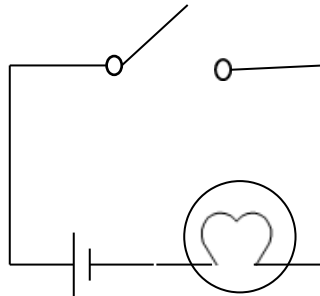
Voltage is the Cause, Current is the Effect

Voltage attempts to make a current flow, and current will flow if the circuit is complete. Voltage is sometimes described as the 'push' or 'force' of the electricity, it isn't really a force but this may help you to image what is happening. It is possible to have voltage without current, but current cannot flow without voltage.



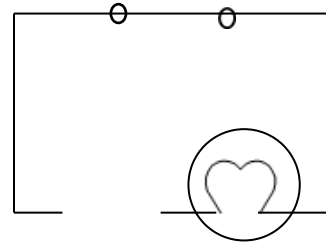
VOLTAGE AND CURRENT

The switch is closed making a complete circuit so current can flow.



VOLTAGE BUT NO CURRENT

The switch is open so the circuit is broken and current cannot flow



NO VOLTAGE AND NO CURRENT

Without the cell there is no source of voltage so current cannot flow.

Voltage	Current
<ul style="list-style-type: none"> - Voltage is a measure of the energy carried by the charge - The proper name for voltage is potential difference - Voltage is supplied by the battery - Voltage is used up in components (lights, motors) but not in wires - Voltage is measured in volts, V. - Voltage is measured with a voltmeter, connected in parallel. - The symbol for V is used for voltage in equations 	<ul style="list-style-type: none"> - Current is the rate of flow of charge - Current is not used up, what flows into a component must flow out. - Current is measured in amps, A - Current is measured with an ammeter, connected to a series <i>To connect an ammeter you must break the circuit and put the ammeter across the gap</i> - The symbol I is used for current in equations
<p style="text-align: center;">How to measure voltage in a circuit</p>	<p style="text-align: center;">How to measure current in a circuit</p>