
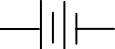


## Drawing Electric Circuits


### Circuit Symbols:


Resistor 

Battery cell 

Two cell battery 

Switch 

Ammeter 

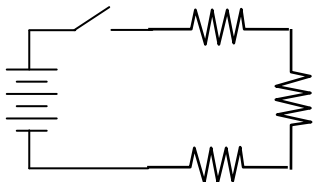
Voltmeter 

Bulb 

Note: Circuits could be drawn differently than these as long as the essential elements are included correctly.

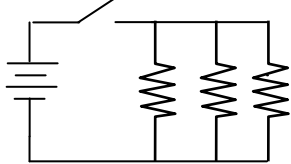
### Draw the following circuits:

1. A series circuit containing a 3 cell battery and 3 resistors connected in series. Place a switch in the circuit at a location where it would turn on or off the current through all resistors.

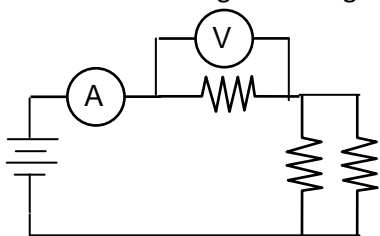


Switch could be on the other side of the battery. (# 2 also)

2. A parallel circuit consisting of a 2 cell battery and 3 resistors in parallel. Include a switch that would turn on or off the current through all resistors.

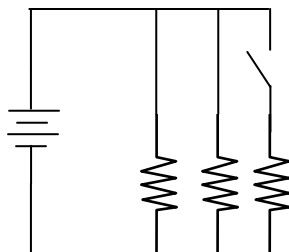


3. A circuit with a 2 cell battery and a resistor in series connected to two more resistors in parallel. Include an ammeter placed to measure the current through the battery. Add a voltmeter to the circuit measuring the voltage of one of the resistors.



Voltmeter could be across the parallel resistors. Ammeter could be on the other side of the battery

4. A parallel circuit with 3 bulbs in parallel and a switch that will turn on or off the current through one of the bulbs only.



Switch could be on one of the other parallel lines.