
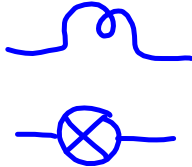



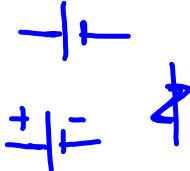






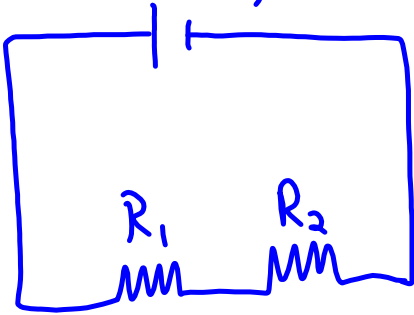
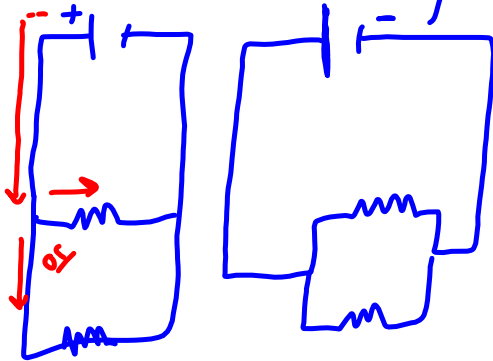
# Symbols

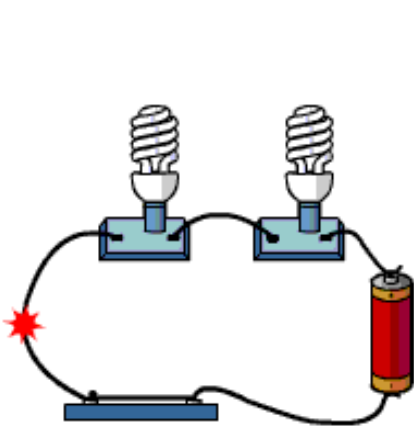
Resistor	Light bulb	Wire	Open switch	Closed switch
				
Power supply	Fuse	Voltmeter	Ammeter	Motor
				

**voltmeter:** measures the voltage of the circuit.

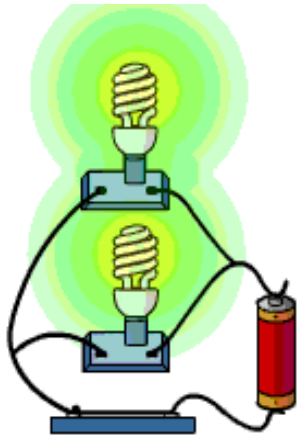
**ammeter:** measures the current intensity of the circuit.

# Types of circuits

Series	Parallel
<p>-One pathway</p> 	<p>-multiple pathway</p> 



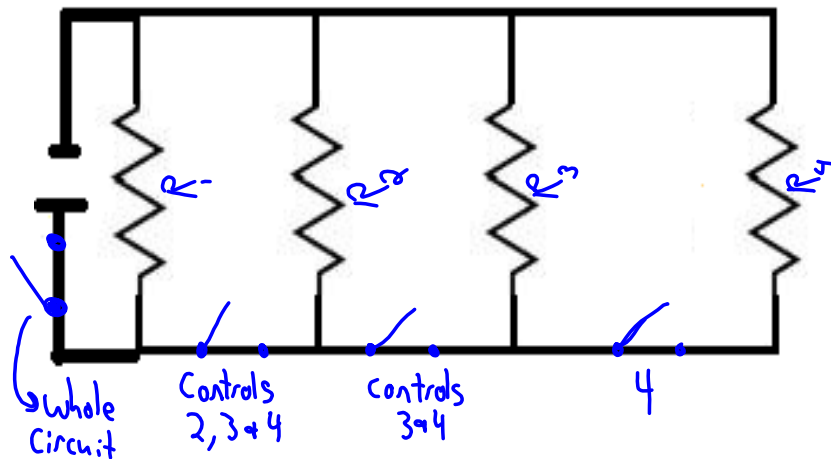
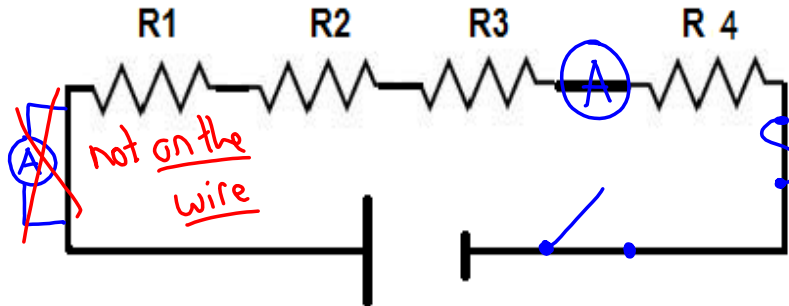
Series Circuit



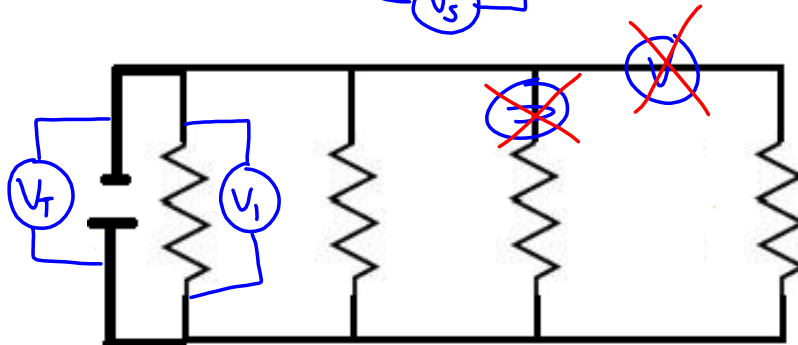
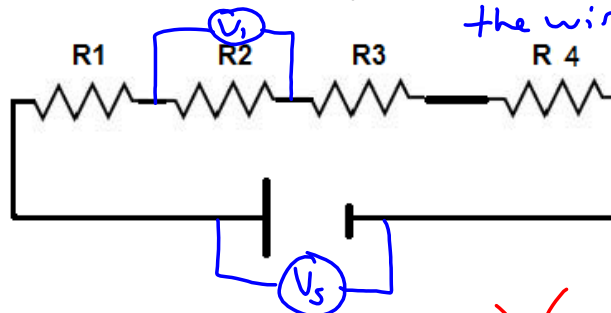
Parallel Circuit

## Symbols on a circuit

**Ammeter, switches and fuses:** All are placed the same way on a circuit, directly on a wire. Depending where they are placed they can control a part, parts or the whole circuit. The way they are placed is called in 'series'.




**Voltmeters:** Are placed in 'parallel' which means above or below the resistor or power supply. → Not directly on the wire



## Putting it all together

Example 1:

- Circuit with one pathway
  - 4 light bulbs
  - Voltmeter for total voltage, ( $V_s$ )
  - Voltmeter for  $L_1$ , ( $V_1$ )
  - Voltmeter for  $L_2$  and  $L_3$  together, ( $V_2$ )
  - Voltmeter for  $L_2$ , ( $V_3$ )
  - Ammeter for total current, ( $A_1$ )
  - Ammeter for current of  $L_1$ , ( $A_2$ )
  - Fuse for the whole circuit.
  - Fuse for  $L_3$
  - Switch for  $L_1$
  - Switch for all lights
-  Series = Same