



Equations:

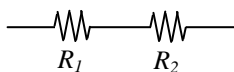
Electric Current: $I = \frac{q}{t}$

Ohm's Law: $V = I \cdot R$

Electric Power: $P = I \cdot V$

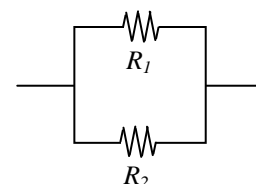
Resistors in Series:

$R_S = R_1 + R_2 + \dots$

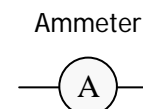
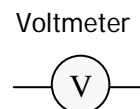
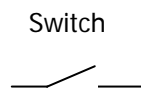
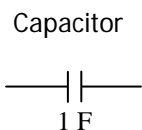
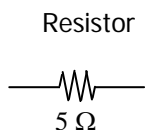
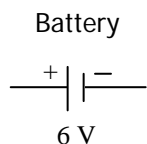


Resistors in Parallel:

$\frac{1}{R_P} = \frac{1}{R_1} + \frac{1}{R_2} + \dots$



Circuit Components:



<u>Name</u>	<u>Symbol</u>	<u>Unit</u>	<u>Notes</u>
Current	I	Ampere (Coulomb/second)	
Charge	q	Coulomb	
Time	t	second	
Potential Difference	V	Volt (Joule/Coulomb)	
Resistance	R	Ohm (Ω)	
Resistance - Series	R_S	Ohm (Ω)	
Resistance - Parallel	R_P	Ohm (Ω)	
Power	P	Watt (Joule/second)	
Energy	E	Watt-second (Joule) kiloWatt-hour (kWh = 3,600,000 W·s)	

Helpful Equations:

$P = \frac{W}{t}$ or $P = \frac{\text{Energy}}{t}$

$W = F \cdot d$

$Q = m \cdot c \cdot \Delta T$