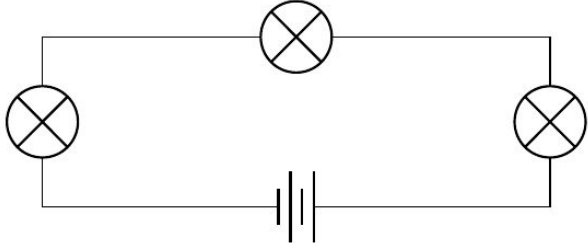
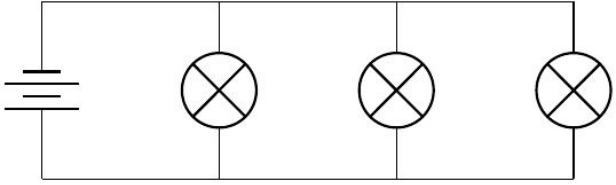


Series vs. Parallel Circuits

Series Circuit	Parallel Circuit
A series circuit has only one path for current to flow through.	A parallel circuit has more than one path for current to flow through.
	
If one of the components in the series circuit is broken, current will not be able to flow to the other components.	If one of the components in the parallel path is broken, current will continue to flow in all the other parallel paths.
The current is the same at any point in the series circuit.	The sum of the currents through each path is equal to the total current that flows from the source.
$I_1 = I_2 = I_3$	$I_T = I_1 + I_2 + I_3$
Voltages in the series circuit equal to the total voltage of the source.	Voltage is the same across each component of the parallel circuit.
$V_T = V_1 + V_2 + V_3$	$V_1 = V_2 = V_3$
The total resistance of a series circuit is equal to the sum of individual resistances: $R_T = R_1 + R_2 + R_3$	The total resistance of a parallel circuit can be found from: $\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$
