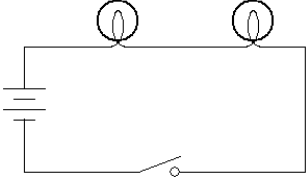
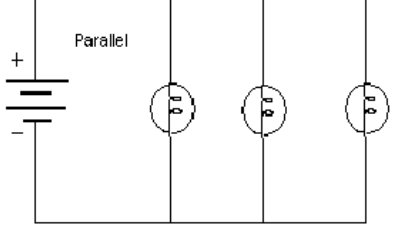


Summary: Series and Parallel Circuits

	Series	Parallel
Diagram		
Description	One path for current to flow	Multiple paths for current to flow
Voltage	$V_S = V_1 + V_2 + V_3$ Add up the individual voltages	$V_P = V_1 = V_2 = V_3$ Voltage is the same across each load
Current	$I_S = I_1 = I_2 = I_3$ Current is same throughout	$I_S = I_1 + I_2 + I_3$ Add up the individual currents
Resistance	Adding more resistors increases total resistance	Adding more resistors decreases total resistance
Brightness of light when more bulbs added	Each light bulb becomes dimmer when adding more - bulb burns out they all go out	Each light bulb stays the same when adding more - bulb burns out others not affected
Brightness of light when more energy added	Brightness will increase with more energy	Brightness will stay the same with more energy