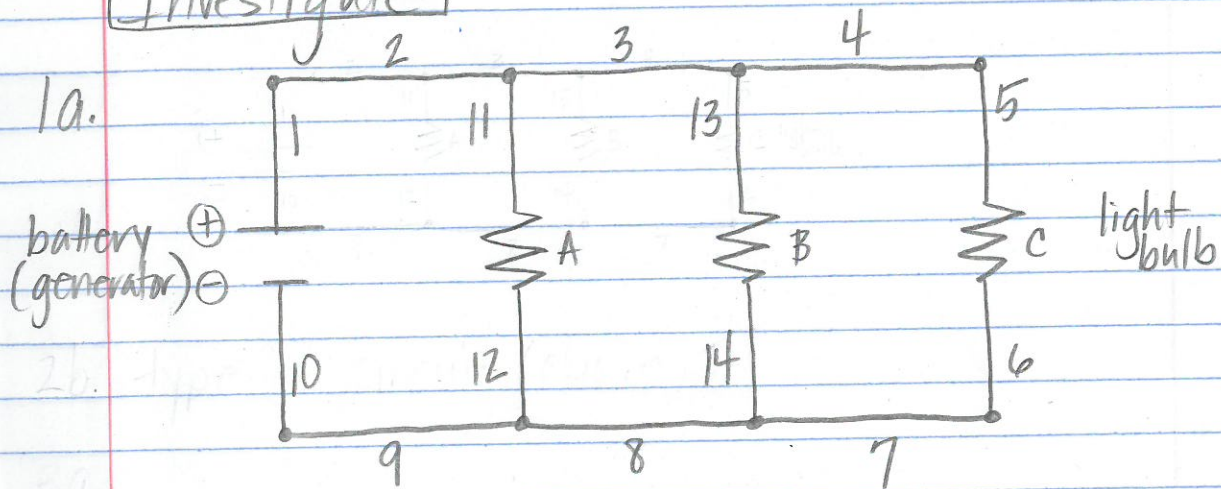


(5b) Current, Voltage, and Resistance in Parallel and Series Circuits: Who's in Control?

Investigate



2b. type of circuit (above):

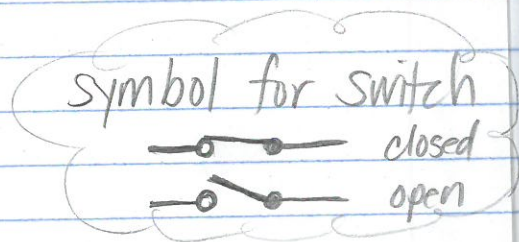
3a.

3b.

4a.

4b.

4c. add to drawing in #1a



5a.

5b.

5c. add to drawing in #1a

bulb A

bulb B+C

e m  
ho's

### Series circuits

$$V_{total} = V_1 + V_2 + V_3$$

$$I_{total} = I_1 = I_2 = I_3$$

### parallel circuit

$$V_{total} = V_1 = V_2 = V_3$$

$$I_{total} = I_1 + I_2 + I_3$$

c. light  
bulb

$$V_{total} =$$

$$R_A =$$

$$R_B =$$

$$R_C =$$

	@ R <sub>A</sub>	@ R <sub>B</sub>	@ R <sub>C</sub>
R, resistance ( $\Omega$ )			
V, voltage (V)			
I, current (A)			
P, power (W)			

for switch

● — closed

● — open