**Station #4: Types of Circuits**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mission B: Electric Circuits Science 9**

1. Complete the missing parts from the table below by either drawing the symbol or naming the component that is drawn already.

|  |  |
| --- | --- |
|  |  |
|  | Resistor |



1. Draw a circuit diagram indicating the direction of the electric current for each circuit below and state if it is a parallel or series circuit.



1. b) c)





d)  e)

1. Put a checkmark under each of the schematic diagrams below that would have the light bulb(s) light up. For the ones that you do not put a checkmark for explain why the circuit will not allow for the light bulb to light.



1. b) c)
2. Complete the sentences below by crossing out the wrong bolded words.
3. In a series circuit, as more lamps are added the lamps **get brighter / get dimmer / stay the same brightness** and the current through each lamp **increases / decreases / stays the same.**
4. In a parallel circuit, as more lamps are added the lamps **get brighter / get dimmer / stay the same brightness** and the current through each lamp **increases / decreases / stays the same**.
5.  Look at the circuit in the diagram below. Circle the correct letter(s) indicating which lamp or lamps will light when:
6. only switch A is closed? **X Y Z**
7. only switch B is closed? **X Y Z**
8. switches A and B are closed **X Y Z**
9. For a summer party, some friends are putting up a string of lights in the garden. What will happen if a bulb blows:
10. If the lights were wired in series?
11. if the lights were wired in parallel?