Ms. Singh Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10th grade Pre-Engineering Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Schematic Worksheet**

1. Draw a schematic of the pictorial circuit.

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| Pictorial    Battery(B1)  Push Button Switch(S2)  Motor(M1) | Schematic |

1. You have been hired to design a circuit for a flashlight. The flashlight needs to be as simple as possible and contain a battery, lamp and on/off slide switch. Design and draw the circuit so your drawing can be sent to the factory to be created.

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1. Build a circuit that turns on a light and fan using a slide switch. Draw the schematic of your circuit below, then build your circuit.

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1. Explain the process of designing a circuit, drawing a schematic and building the circuit. In your explanation answer the following questions in complete sentences:
   1. What did you do first in the process?
   2. Did your circuit work correctly the first time that you built it?
   3. What were some challenges that you faced?

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