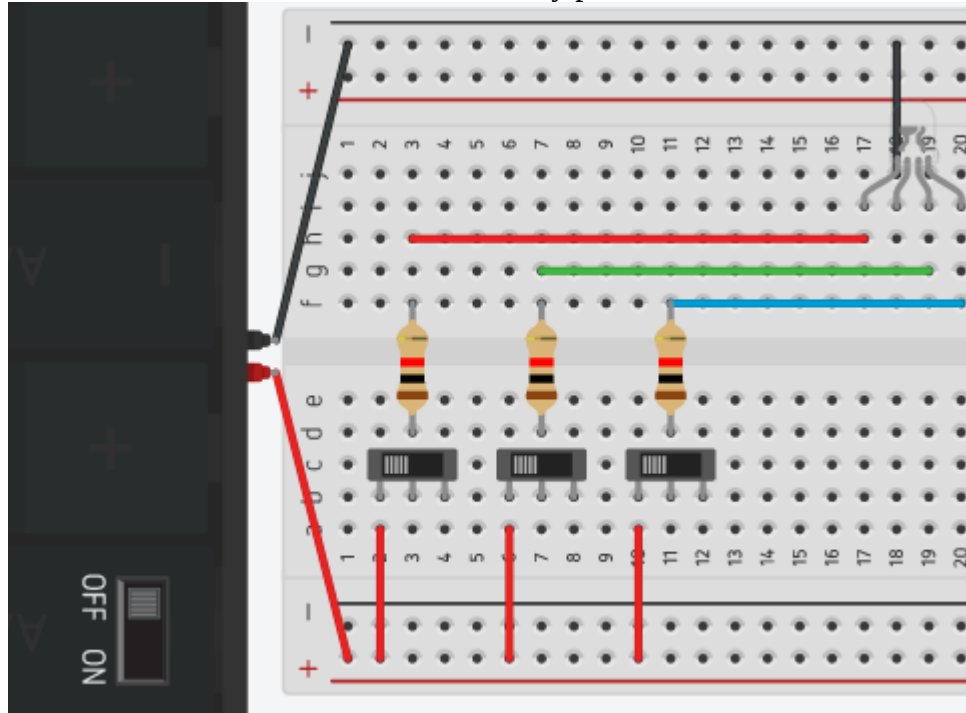


Name: _____

Date: _____

Instructions: Below is a diagram you can recreate using TinkerCAD – Circuits. To receive full points, you must show Mr. Figueroa your **working simulation** of the design, and you must reply with your **observations** in your notebook. Make sure to also sketch the design in your notebook and label the circuit elements with the names you see in the **Bill of Materials**.

Secret Design #1 - Bill of Materials: Resistors x3, Battery pack x1, RGB LED x4, Slider Switches x3



Notebook Question #1 – How many switches do you see in this circuit? Does the battery pack one count?

Notebook Question #2 – Each switch position is either ON or OFF. If 0 is OFF, and 1 is ON, then RGB 000 = OFF, OFF, OFF. This will give you an LED that isn't turned on. IF 111 = ON, ON, ON, the the RGB will be white. What color do you see if the switch combination is 100?

Notebook Question #3 – 010?

Notebook Question #4 – 001?

Notebook Question #5 – 110?

Notebook Question #6 – 001?

Notebook Question #7 – Which switch combination gives you pink?

Notebook Question #8 – Which switch combination gives you orange?

Notebook Question #9 – Which switch combination gives you the Nasri school color?