

TinkerCAD Circuit Assignment

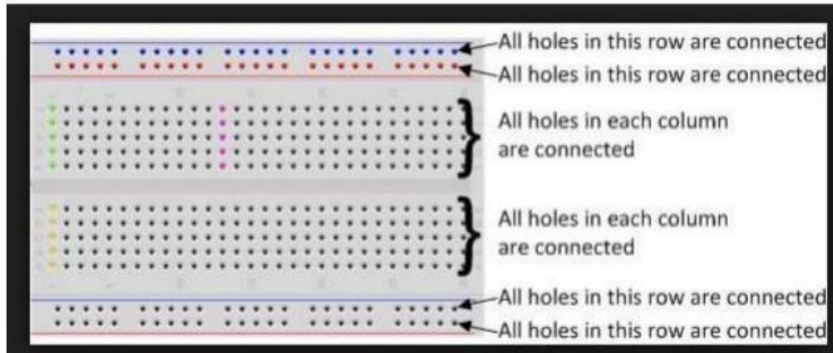
Assignment: Design each of the Circuits below in TinkerCAD. Add a Note on to the screen to calculate out the Voltage, Current or Resistance to the questions with the circuit.

Submission : Share the TinkerCAD final to teacher

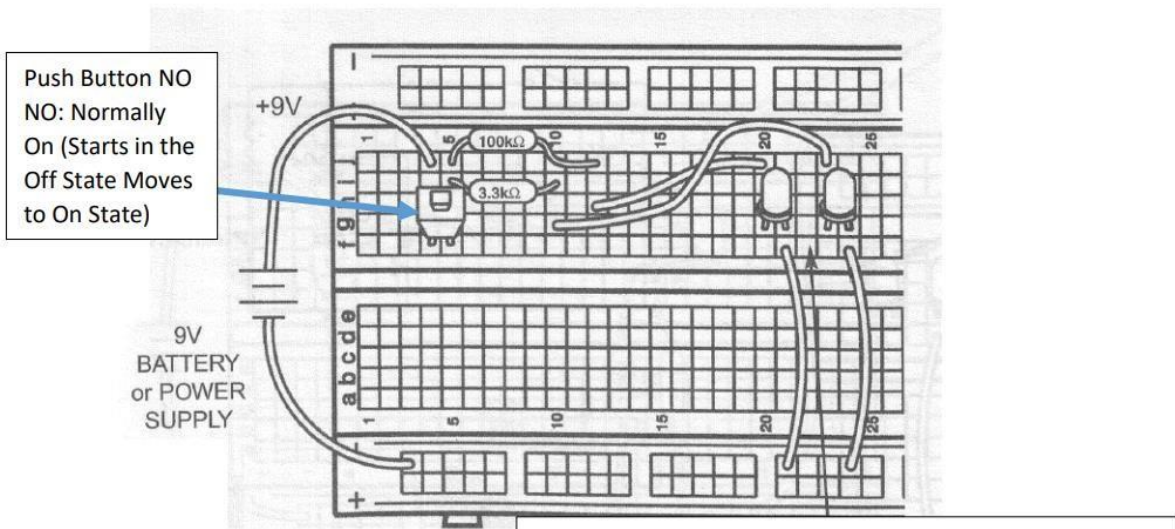
Assignment

Directions: Design the following circuits as schematic. Place both assignments on the same sheet as the tutorials. Print Setup as shown below. Label each Schematic below its image.

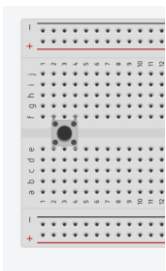
Reference: Bread Board



Parallel Circuit: Create a Wiring Diagram of the following circuit. NOTE: Follow the wires and what components they connect too.



Standard Push Button

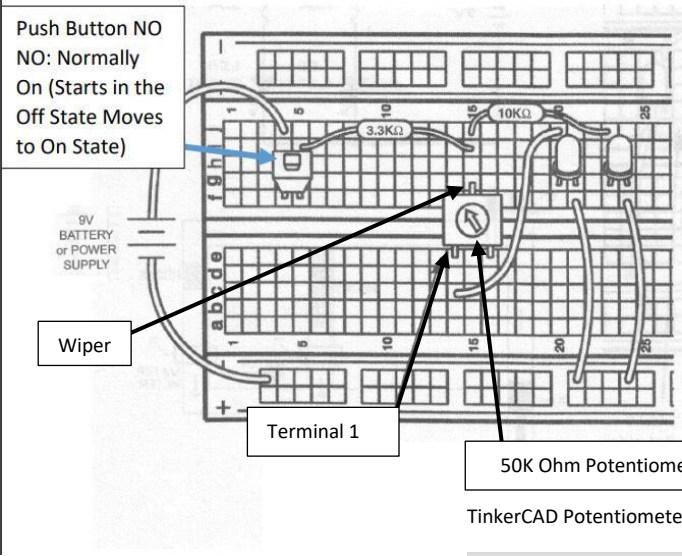


NOTE: 2 Prongs must be on either side of the neutral (middle) area. Circuit will only use the top two prongs in Row F; the two prongs in Row E would be used to sense if the button was pressed with a controller like an Arduino Board

Label the Circuit 1: Parallel and answer the following questions (Type answers below the name of the circuit)

- a. What is the current?
- b. What is the Current Thru
 - i. 110 KOhm Branch
 - ii. 3.3 KOhm Branch

Combined Circuit: Create a Wiring Diagram of the following circuit. NOTE: Follow the wires and what components they connect too.



Label the Circuit 2: Combined
Answer the following questions (Type answers below the name of the circuit)

- What is the total current?
- What is the Voltage Drop across the 3.3 KOhm Resistor?
- What is the Current Thru
 - 10 KOhm Branch
 - Max Current thru Variable Resistor (50 KOhm) Branch

