Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objective:**

Given a schematic, the student will construct an electrical circuit to the specifications listed on the drawing. The student shall calculate any unknown quantities and complete the design list. The student shall then select the necessary components in the design list and construct the circuit on the Proto board. Verification of the circuit’s performance shall be determined by taking quantity measurements of each component.

**Tools:**

The classroom issued Proto kit shall be used to complete this hands on test. Calculators and multi-meters are allowed during this test but not a cell phone.

**Time Limit:**

Students are allowed 60 minutes to complete the test.

Based on the schematic on Page 2, fill-in or calculate the values for the *Design List*

|  |  |  |  |
| --- | --- | --- | --- |
|  | E | I | R |
| R1 |  |  |  |
| R2 |  |  |  |
| R3 |  |  |  |
| Total |  |  |  |

*Design List*

Build the circuit on the Proto board. Complete the *Quantities List* by taking measurements of the indicated components with a multi-meter.

|  |  |  |  |
| --- | --- | --- | --- |
|  | E | I | R |
| R1 |  |  |  |
| R2 |  |  |  |
| R3 |  |  |  |
| Total |  |  |  |

*Quantities List*

