**Resistance Lab Worksheet**

1. Is the potentiometer linear or logarithmic? Record data below.

|  |  |  |  |
| --- | --- | --- | --- |
| Position | Resistance from Center to Leg 1 | Resistance from Center to Leg 2 | Resistance from Leg 1 to Leg 2 |
| 0 |  |  |  |
| 1/4 |  |  |  |
| 1/2 |  |  |  |
| 3/4 |  |  |  |
| 1 |  |  |  |

1. Repeat with the DIY potentiometer made with pencil lead or a several feet of nichrome wire

|  |  |
| --- | --- |
| Position | Resistance |
| 0 |  |
| 1/4 |  |
| 1/2 |  |
| 3/4 |  |
| 1 |  |

1. Shine a flashlight on the photoresistor and record the distance to the light versus the resistance.

|  |  |  |  |
| --- | --- | --- | --- |
| Distance or position | Resistance | Calculated Current | Measured Current |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. Thermistor measurements

|  |  |  |
| --- | --- | --- |
| Temperature | Method | Resistance |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |