Lab 2 – Reading and Sorting Resistors

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The purpose of this lab is to:

Learn the resistor color code using 15 resistors which must be sorted from smallest to largest value. Build a resistor kit that includes 15 resistors and, sort resistors based on color code from smallest to largest and measure the resistance of each resistor and verify sorting

Equipment needed:

1 – Digital Multimeter

1 – 15 unique resistors

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|  | **Color Code** | **Measured  Value** |
| 100 = | Brown black brown gold | 98.7 |
| 220 = | Red red brown gold | 216.4 |
| 330 = | Orange orange brown gold | 324.2 |
| 470 = | Yellow violet brown gold | 464.0 |
| 1K = | Brown black red gold | 981.2 |
| 2.2K = | Red red red gold | 2.15k |
| 3.3K = | Orange orange red gold | 3.231k |
| 4.7K = | Yellow violet red gold | 4.60k |
| 10K = | Brown black orange gold | 9.80k |
| 22K = | Red red orange gold | 21.5k |
| 33K = | Orange orange orange gold | 32.9k |
| 47K = | Yellow violet orange gold | 46.87k |
| 100K = | Brown black yellow gold | 98.2k |
| 1M = | Brown black green gold | 0.99M |
| 10M = | Brown black blue gold | 10.26M |

Observations: Some of the resistors were not in the right bins.