

## Data Collection Sheet and Useful Information for Resistivity Lab

	Voltage (V)		Current (A)
<b>Wire Gauge 18:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 18:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 18:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 22:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 22:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 22:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 26:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 26:</b> Length = _____	V1		I1
	V2		I2
	V3		I3
<b>Wire Gauge 26:</b> Length = _____	V1		I1
	V2		I2
	V3		I3

AWG	Diameter	
	mm	inch
10	2.59	0.102
11	2.3	0.0907
12	2.05	0.0808
13	1.83	0.072
14	1.63	0.0641
15	1.45	0.0571
16	1.29	0.0508
17	1.15	0.0453
18	1.02	0.0403
19	0.912	0.0359
20	0.812	0.032
21	0.723	0.0285
22	0.644	0.0253
23	0.573	0.0226
24	0.511	0.0201
25	0.455	0.0179
26	0.405	0.0159
27	0.361	0.0142
28	0.321	0.0126
29	0.286	0.0113
30	0.255	0.01
31	0.227	0.00893
32	0.202	0.00795

BNC 18 gauge:  $R = 0.4219 \, \Omega/\text{ft}$

BNC 22 gauge:  $R = 1.055 \, \Omega/\text{ft}$

BNC 26 gauge:  $R = 2.670 \, \Omega/\text{ft}$