

AE-237 Basic Measurement Lab: Volts and Resistance

NAME: _____ DATE: _____

Battery Description / Brand	printed voltage	Measured Voltage 'no load'	Measured Current 'loaded'	Loaded Voltage (requires partner)

NOTES:

- **LOAD** is defined as 'the circuitry that is being powered by the power source, in this case, the battery.' The load might be as simple as a light bulb, an LED or as complex as a laptop.
- A '**No Load**' condition puts no stress on the battery
- '**Loaded**' simulates the stress under normal operating conditions.

Standard Resistors

1st significant band	2nd significant band		3rd Multiplier band	4th Tolerance band	calculated Ω	Measured Ω
brown	black		orange	silver		Sample
1	0		X 1000	+/- 10 %	10,000Ω	Sample

Precision Resistors

1st significant band	2nd significant band	3rd precision band	4th Multiplier band	5th Tolerance band	calculated Ω	Measured Ω
brown	black	black	red	brown		Sample
1	0		X 100	+/- 1 %	10,000Ω	Sample