

_____’s Resistor Tree Circuit Board
was used to conduct the experiment

	Resistance	Voltage
Battery by itself:	0k Ω	____V
Measurement 1		
Measurement 2		
Measurement 3		
Measurement 4		
Measurement 5		
Average Change:		

Instructions: Follow these instructions when completing your experiment.

1. Measure the voltage of the battery by itself before you do anything (note: this is done because the actual voltage of the battery may vary slightly).
2. Connect your battery to the circuit board. Keep track of which direction is the positive and negative side of the circuit (note: connecting the battery in the wrong direction will not damage this particular circuit).
3. Measure and record resistance first. To do this — measure from “Tap 1” to “Tap 2” to see how much resistance is in the circuit at that point.
4. Then measure and record the voltage that is present in the circuit after each resistor measurement to see if resistance has had any effect on voltage. To do this measure the voltage from “Tap 2” to “Tap 6” and record your results.
5. Repeat the process. For your next set of measurements — measure the resistance from “Tap 1” to “Tap 3” to see how resistance changes when there are two resistors, and then measure the remaining voltage in the circuit by measuring “Tap 3” to “Tap 6”. Continue the process until you have all of your results recorded.

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5. Repeat the process. For your next set of measurements — measure the resistance from “Tap 1” to “Tap 3” to see how resistance changes when there are two resistors, and then measure the remaining voltage in the circuit by measuring “Tap 3” to “Tap 6”. Continue the process until you have all of your results recorded.