

_____’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.

分压电路实验
姓名: _____

	电阻	电压
电池	0k Ω	____V
测量 1		
测量 2		
测量 3		
测量 4		
测量 5		
平均改变值		

说明: 按照以下要求完成实验。

- 1.在进行任何操作之前, 请自行测量蓄电池的电压(注意: 因为蓄电池的实际电压可能略有变化)。
- 2.将电池连接到电路板, 并跟踪电路的正极和负极(注意: 以错误方向连接蓄电池不会损坏此特定电路)。
- 3.测量并记录电阻。测量“1”到“2”之间的电阻, 查看该处电路中的电阻值。
- 4.然后测量并记录每次电阻值后电路中的电压, 以查看电阻是否对电压产生影响。测量从“2”到“6”的电压并记录结果。
- 5.重复此过程。对于下一组测量-测量从“1”到“3”的电阻, 查看当有两个电阻器时电阻如何变化, 然后通过测量“3”到“6”来测量电路中的剩余电压。继续此过程, 直到记录了所有结果。