Electric Circuits Auxilliary Items

For Voltage-Current-Resistance Lab (Tape the following into your Data section and complete.)

Data:

# of Batteries	ΔV (Volts	I (Amps)
1		
2		
3		
4		

Resistor #1: R =_____ Ω (based on color code)



Resistor #2: R =_____ Ω (based on color code)

# of Batteries	ΔV (Volts	I (Amps)
1		
2		
3		
4		



For Energy Audit Activity (Tape the following into your Data section and complete.)

Data:

Electrical Device	Time* (h)	Power o (W)	r Current (A)	Energy (kW•h)	Cost** (\$)

Estimated weekly time for the entire household Calculated based on the cost of $0.15/kW \cdot h$ *

**

Data:

Electrical Device	Time* (h)	Power o (W)	r Current (A)	Energy (kW•h)	Cost** (\$)

Estimated weekly time for the entire household Calculated based on the cost of $0.15/kW \cdot h$ * **

For Combination Circuits Lab

(Tape the following into your Data section and complete.)

Data:



	Measured Current (A)	Measure ∆V (V)	Calculated Resistance (Ω)	Theoretical Resistance (Ω) -color bands-	Percent Error
R ₁			$\Delta V/I =$		
R ₂			$\Delta V/I =$		
R ₃			$\Delta V/I =$		
R4			$\Delta V/I =$		
Total (Battery)			$\Delta V_{tot} / I_{tot} =$	R _{eq} = (use eq'n)	

Clearly show your calculations for the resistance (in cells) and the percent error (using calculated and theoretical resistance values) for each of the four resistors.