Resource Conservation Experimental Lab Sheet

TITLE: By starting some **energy** saving strategies, how much energy can I save at my house?

PURPOSE: Why do you think you should do this experiment? What do you hope to learn? Use complete sentences.

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HYPOTHESIS What do you think the answer to your question will be and why?

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EXPERIMENT Read the procedure and then identify the following:

Independent Variable: _____

Dependent Variable: _____

Constants: _____

_____

Materials

Electric meter

Data chart

pencil

Procedure:

1) Choose a time each day that you will be home to check your electric meter.
2) Check your meter at the same time every day.
3) Use your chart to calculate how much electricty you use each day.
4) Look at your data with your family and talk with them about how you can conserve energy in your house. Create an energy saving plan and write it down.
5) Collect a second week of data the same way you did before, while following your family's energy plan.
6) Analyze your data. What does it tell you?

Quantative Data: Complete the chart below while you do your experiment.

Week 1	**Date/Time**	**Electric Meter Reading** **(Be sure to x10, x20, etc. if needed)**	**Daily Usage**	**Cost per Day** **(multiply daily usage x $0.1?)**
Day 1			N/A	
Day 2			(Day 2 –Day 1)	
Day 3			(Day 3 –Day 2)	
Day 4			(Day 4 –Day 3)	
Day 5			(Day 5 –Day 4)	
Day 6			(Day 6 –Day 5)	
Day 7			(Day 7 –Day 6)	
Total	N/A	**N/A**		

Week 2	**Date/Time**	**Electric Meter Reading** **(Be sure to x10, x20, etc. if needed)**	**Daily Usage**	**Cost per Day** **(multiply daily usage x $0.1?)**
Day 1			N/A	
Day 2			(Day 2 –Day 1)	
Day 3			(Day 3 –Day 2)	
Day 4			(Day 4 –Day 3)	
Day 5			(Day 5 –Day 4)	
Day 6			(Day 6 –Day 5)	
Day 7			(Day 7 –Day 6)	
Total	N/A	N/A		

OBSERVATIONS: Qualitative Data- Fill in each box as you collect data. Write any observations you make about how energy is used in your house that day. (For example, maybe your family was gone a lot of the day, maybe you had extra people over, maybe you had your air conditioner off or maybe you had your heater on full blast!)

Week 1 Observations:

Date	Observations

Week 2 Observations:

Date	Observations

CONCLUSION:

- ⇒ Talk about the data you got.
- ⇒ Why did you data turn out that way?
- ⇒ Give specific examples.
- ⇒ What is the answer to your question?
- ⇒ Does it agree with your hypothesis?
- ⇒ Did anything in your experiment go wrong?