LR Science Laboratory Report Format

(neatly written, no cross outs, may be typed, complete sentences, grammar, mechanics, avoid pronouns such as "my", "our", "we", etc.)

Descriptive Title
Example: Determining the Amount of Bacteria in Lake Region Bathrooms and Classrooms
Date
Name

INTRODUCTION:

Purpose: State the purpose of the experiment. The purpose is one sentence that answers the question: "What are we trying to learn?" Example: The purpose of this experiment is to understand where bacteria exists.

Background information: Give information related to the experiment. This could be personal experience and/or classroom information, etc. Example: Bacteria thrive in warm, moist environments. Bathrooms are warm and moist because of showering. This leads to your hypothesis.

Hypothesis: What you believe will happen, stated as a fact. This is a prediction of your conclusion. The hypothesis must be in an "If" ..(action).. "then" ..(prediction) format <u>and</u> contain a numerical predictor. Example: **If** bacteria are collected from the bathroom and from the classroom, **then** there will be 25% more bacteria from the bathroom sample than the classroom.

METHODS & MATERIALS:

Describe the materials, if necessary (every body knows how to use a thermometer), and how they were used in the experiment. This section should be written in the same order that you used during the experiment. Mathematical calculations should also be described. Example:
1. Obtain two petri dishes.
2. Label one plate "A" and the other plate "B".
3. .....etc.

RESULTS:

Data: Record measurements and observations. Data tables can be constructed.

	BATHROOM PLATE A	CLASSROOM PLATE B
SURFACE AREA (cm²)	20	60

Analysis: Use mathematics to summarize your data. For example:

Bathroom/Classroom = 20 cm² / 60 cm² = 0.33 = X 100% = 33%
The bathroom bact. area is 33% less than the classroom bact. area or, 100% - 33% = 67% greater bact. area in the classroom.
Create well-labelled graphs.

This section <u>must finish</u> with a <u>written summary</u> of the <u>results</u> of your analysis.

CONCLUSIONS:

Accept or reject your hypothesis with reference to your <u>analysis</u>. Discuss your results with the **Purpose** in mind. This is where you give a reasonable explanation of your results. How were the results unexpected or expected? Why did the experiment turn out the way it did? Identify the underlying concept of the exercise.

Discuss errors that could have effected the outcome of the experiment. Do not give wild assumptions. Do not use broad statements such as "human error" "measured wrong", etc.

Generate new questions/ investigations to be explored. Make suggestions for further study that could answer these questons.