# THE RESEARCH LOG

## A Research Log is a day to day record of all activities you did on your research project. It tells what was done, where it was done, how it was done, and when it was done. It is PROOF of what you did.

## SET-UP

### Obtain an 80-page composition book; no spirals or loose leaf papers

### Number all the pages in ink.

#### Begin with the very first page; place the number ‘1’ in the lower right hand corner

#### Turn the page. Place the number ‘2’ in the lower left hand corner.

#### Continue numbering; odd numbers in the lower right—hand corner and evens in the lower left-hand corner.

### Title Page: On page 1, Record your name, school name, city of the school, teacher’s name and school year.

### Only use blue or black ink in your logbook. Never use pencil. This is a legal document. If possible, to use only one color of ink throughout. Avoid ink colors other than blue or black unless you are trying to highlight an important note or you are making a correction.

### Mistakes

#### Mistakes are to not to be erased or crossed completely out.

#### Cross out mistakes with one line through the word.

#### You may choose to use another color ink to make corrections.

#### If there is a large section that needs correction, you may draw one line through the entire section.

### Make copies of all forms and other paperwork and tape into logbook

### If you needed a qualified scientist and/or designated supervisor for your experiment, have them sign logbook at beginning.

## Entries

### Record the date and time of each entry.

### Record place if you are using more than one place in which to conduct your experiment (i.e. baseball field).

### Record the names of any adults that are present.

### There may be multiple entries on one page.

### One entry may take multiple pages. If you need more than one page for an entry:

#### Indicate where the entry is continued. For example, “CON’T ON PG. 32.”

#### On the top of the continued 32, indicate which page the entry began. For example, “con’t from pg. 31”.

### Record the general contents of the entry in the Table of Contents (i.e. Supply list, References, Procedure).

### Entries may be interrupted by another entry.

## Contents

### Background research

#### Include your research of topic on internet or library

#### Give a synopsis (brief summary) of the literature you reviewed

#### Include ideas that you thought of when you read the literature

### Hypothesis

#### Your problem statement (stated as a question) and your hypotheses (measurable predictions)

### Materials list

#### A description of any equipment you used

#### A detailed description of any equipment you built (include sizes, materials, etc)

### Procedure

#### Specific instructions for making solutions and/or media

#### Include any specific precautions for chemicals used that require special care (you find this out from the MSDS sheet on each chemical) the msds sheets can be accessed at h!tp:l/www.f1innsci.coja.·click on the safety icon and the "MSDS collection" link.

#### Include any special disposal methods, if needed

### Data/observations

#### All of your raw data

#### Additional observations during experimentation that are not part of your raw data (such as temperature, pressure, anything unusual that happened)

### Analysis

#### All statistical analyses (include equations used and show calculations)

### Discussion

### References

#### A list of all contacts (scientists, engineers, etc.) with phone #8, fax, email, etc