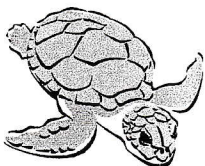
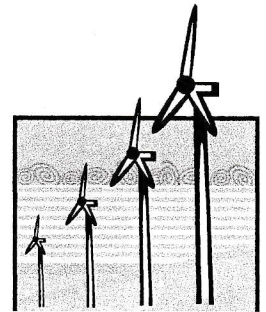
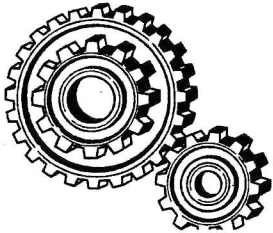
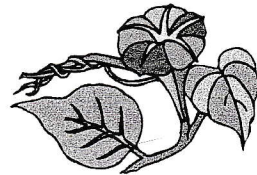
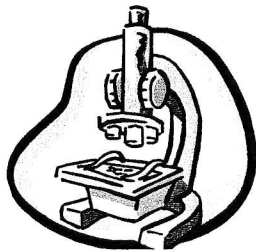


RESEARCH PROJECT

KINDERGARTEN - 5TH GRADE



Student Information Packet



Helpful Hints for Students



- ⌚ Start EARLY; don't wait until the last two weeks before it is due.
- ⌚ Plan it out. It will be much more fun if you spread the time out over several days per week or several weekends, and you won't have to race to get it done! It might look like this:
 - Week 1 – Decide on your QUESTION – what you want to find out.
 - Week 2 – Collect and read books about your topic.
 - Week 3 – Work the steps of your project.
 - Week 4 – Think about the results and make your charts or graphs.
 - Week 5 – Write your report.
 - Week 6 – Make your display.
- ⌚ Check with your parent or teacher if you want to use a web site for research. Not all web sites give correct information.
- ⌚ Students in 4th and 5th grades should be doing almost all of this by themselves.
- ⌚ Students in 2nd and 3rd grades should be able to do many parts.
- ⌚ Students in Kindergarten and 1st grade will need help for most of the project.
- ⌚ This is to be a fun process. "Success" is a completed project where you had fun and learned a lot.
- ⌚ Enjoy the fun!



RESEARCH PROJECT

INVESTIGATING

A SCIENCE FAIR

RESEARCH PROJECT

For Kindergarten through 5th Grade

A Research science project is one where you will learn all about a science topic or concept that you are personally interested in by reading books & magazines, going to libraries or other institutions, talking to an expert in the field, and more. Your display board will support your research with photos, drawings, diagrams, dioramas, etc.

I. PROBLEM / QUESTION

Choose a topic that you are interested in learning more about. State the problem as a one sentence **question**. Be specific.

II. HYPOTHESIS

A **hypothesis** is what you think will be the answer to your question. It is your "best guess" before you actually DO the research. It is written as one sentence. *Examples: You are taller in the morning than at night, or, A Granny Smith apple has more seeds than any other apple.*

III. RESEARCH

Use a minimum of two sources. Use different types of sources. While conducting your research, think about how it connects to your question and your hypothesis. Take good notes that you can organize later as part of your display.

IV. CONCLUSION

Look over your research. Analyze the information and see what it tells you about your topic. The **conclusion** answers the hypothesis. Does your research prove or disprove your hypothesis?

ELEMENTARY RESEARCH PROJECT

WRITTEN REPORT CONTENT

Kindergarten through 5th Grade

This written report should be accompanied by a display board with information shown as diagrams, photographs, charts, graphs, dioramas, etc. that support your research.

∞ **TITLE PAGE**

See *Written Report Format* on next page.

∞ **PURPOSE**

In three sentences or less, tell why you did your science project on the topic you chose.

∞ **ACKNOWLEDGEMENTS**

In one or more sentences, say "Thank You" to those who have helped you with your project. You should include those who gave you guidance, materials and the use of facilities or equipment.

∞ **TABLE OF CONTENTS**

List each of the following sections and the page numbers for each (see page 21). Type the page number at the bottom of each page after you have finished the final copy of your report.

∞ **PROBLEM**

State the problem in the form of a question. The problem is one sentence long and specific. Your page numbering begins here.

∞ **HYPOTHESIS**

The hypothesis is an educated guess which answers the question. The hypothesis is a statement which is one sentence long.

∞ **RESEARCH**

It is now time to use information from books, magazines, interviews, etc. This section of your paper is your report on the work and research conducted by others that relates to your topic.

∞ **CONCLUSION**

Look over your research and then write what the information shows or indicates. The conclusion is one or two sentences long and should either confirm or reject your hypothesis.

∞ **APPLICATION**

Now that you have finished your project, use this section to share with others your thoughts about this experience. Did you have any problems? What would you do differently next time? Explain how what you learned from your project applies to the real world.

∞ **SOURCES / BIBLIOGRAPHY**

List all books, articles, pamphlets and other communications or sources that you used for researching your topic and writing your paper. Only one may be an encyclopedia. Interviews with experts in your field of study are encouraged.



ELEMENTARY RESEARCH PROJECT

WRITTEN REPORT FORMAT

- Each line with a box () in front of it begins a new page in the report.
- **Items with a star (★)** must be included in reports for **Kindergarten–2nd grade** projects. Other sections are optional for K-2nd grades.
- **ALL** of the items listed below must be included in reports for **3rd–5th grade** projects.

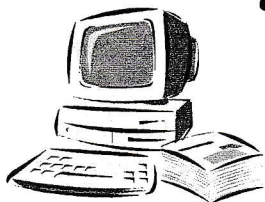
★ Title page

Title in middle of page

In lower right-hand corner:
Last Name, First Name
Grade ____
Teacher Name
School Name
Date (include year)

- Purpose
- Acknowledgements
- Table of Contents (with page numbers)
- ★ Problem (Question) (page numbering starts here)
- ★ Hypothesis
- ★ Research
- ★ Conclusion
- Application
- ★ Sources / Bibliography (Use format on next page.)

1. The original report goes inside the report pocket on the display board.
2. A COPY should be kept at home or on the computer.



**ELEMENTARY RESEARCH PROJECT
WRITTEN REPORT FORMAT
FOR
SOURCES / BIBLIOGRAPHY**



Entries in a bibliography are alphabetized by the last name of the author or the first word of the title. An entry for which the author is unknown, such as a newspaper article or an unsigned review, is alphabetized by the first word of the title, excluding the articles *A*, *An*, and *The*.

Books

Basic Form Bronowski, Jacob. The Ascent of Man. Boston: Little & Brown, 1973.

Two Authors March, James G., and Herbert A. Simon. Organizations. New York: Wiley, 1958.

Magazines

Weekly Tuchman, Barbara W. "The Decline of Quality." New York Times Magazine, 2 Nov. 1980: 38-57.

Monthly Brown, Norman O. "Apocalypse: The Place of Mystery in the Life of the Mind." Harper's. May 1961: 27-35.

Newspapers

Basic Entry Kristof, Nicholas D. "Oil Futures Plunge on OPEC Doubt." New York Times, 3 Jan. 1985: D13.

Reference Works

Encyclopedia Entry, Unsigned

"Huygens, Christiaan." Encyclopedia Britannica. 13th ed.

Dictionary Entry

"Advertisement." Webster's Third International Dictionary. (Because the number of the edition appears in the title, the date is not necessary.)

Atlas Entry

"Hidden Face of the Moon." Times Atlas of the World. 1981 ed.

Nonprint Sources

Video

Redford, Robert, dir. Ordinary People. With Mary Tyler Moore and Donald Sutherland. Paramount, 1980.

Computer Materials

Computer Software

Visispell: Fut.heuristix. Version 1.00. Computer software. San Jose: Visicorp, 1983. Disk.

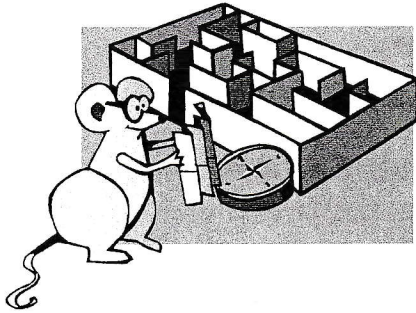
Web Sites

Corte, Corrinne. "Why Are British Sailors Called Limeys?" *Ask A Biologist*. Arizona State University.
<http://ls.la.asu.edu/askabiologist/research/scurvy/index.html> (8 Mar. 2001)

Interview

Persons name (last name first), position or work title, place of interview, date of interview.





ELEMENTARY RESEARCH PROJECT DISPLAY INFORMATION

BACKBOARD MATERIALS

The backboard must be sturdy and stand by itself on a table. Foam core-board and cardboard are the best materials. If you need to cut through the sides of your core-board to make "wings", do not cut all the way through.

COLORS

If you need to paint your backboard, enamel paint works best. Do not use water-based paint. Contact paper may also be used. Use a minimum of three contrasting colors on your board.

LETTERING

Your title and subtitles may be computer-generated or cut from construction paper. Do not freehand the letters. The title letters should be 3-4 inches high. The subtitle letters should be 1-2 inches high. The subtitles, which are mandatory on the display board, are: Problem, Hypothesis, Research, and Conclusion. All items on the display must be glued to the board. Do not use pins, tacks, staples, or tape.

DRAWINGS, PHOTOS AND GRAPHS

Drawings and photos are most useful on the display. Drawings should be drawn in pencil first and then retraced. Drawings should be in color and outlined in thin black felt tip pen. Graphs and charts may be used in the Research section. They may be computer-generated. All graphs and charts must have explanatory titles. Graph axes must be labeled.

If you have a camera, you should photograph your research in progress. All photos must be titled.

DISPLAY DIMENSIONS

1. When backboard (display portion) is flat, it should be 48 inches wide.
2. Side panels ("wings") should be 12 to 18 inches.*
3. Height should be no more than 48 inches.

REPORT POCKET

There must be a "pocket" on the display to hold your report.

When you have decided what you are going to put on the backboard (display), lay the unglued display on the floor and look at it carefully. Have family and friends look at it and ask their opinions. Then, you should glue everything into place. Examples of displays will be shown and discussed in class.

DISPLAY SIZE & SET-UP

FOR SCHOOL SITE AND I BUSD SCIENCE FAIRS

