

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:



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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.
- ^(E) Students in 2nd and 3rd grades should be able to do many parts.
- ^(b) 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!



COLLECTION PUTTING TOGETHER A SCIENCE FAIR COLLECTION PROJECT

For Kindergarten and 1st Grade ONLY

Collect and organize something of interest, answering questions related to observations made while exploring your world.

I. QUESTION

Choose a topic that you are interested in <u>learning more about</u>. Ask a one sentence **question** that you will find the answer to by collecting something. *Examples: What kinds of insects live in my backyard? What kinds of leaves grow in my neighborhood? What different twigs grow on trees in the park by my house?*

II. HYPOTHESIS

A **hypothesis** is what you think will be the answer to your question. It is your "best guess" before you actually go and collect your evidence. It is written as one sentence. *Example: In the park near my house, there are these kinds of twigs:*

III. EXPERIMENTATION

- A. Materials: Think about all the materials you will need to gather and sort your collection.
- **B.** Collect and Sort: Time to have fun collecting! Once you've gotten your collection together, sort it in two or more different ways.
- **C. Observe and record data:** Take pictures, do drawings, charts and graphs of all the ways you sort your collection. See what it looks like.
- **D. Results:** Compare and evaluate the different pictures, drawings, charts and graphs you did for your collection. What do they tell you? Evaluate the results.

IV. CONCLUSION

The **conclusion** answers the hypothesis. Look at the results and figure out if they prove or disprove your hypothesis, and why.

ELEMENTARY COLLECTION

WRITTEN REPORT CONTENT

Kindergarten & 1st Grade

Solution TITLE PAGE

See Written Report Format on next page.

Sector PURPOSE

What did you collect? Why did you choose that to collect? What did you want to find out? What things will you compare?

This is where you thank those who helped you with your collection.

♥ PROBLEM (QUESTION)

This is your question – this is what you want to find out. *(Example:* What kinds of leaves grow in my neighborhood?)

✤ HYPOTHESIS

This is what you think the answer to your question might be. *(Example:* In my neighborhood there are these kinds of leaves: ______)

This is the collection that answered your question.

- A. List all of the materials you used.
- B. Sort collection in different ways.
- C. Record (pictures, graphs, charts, etc.) all of the ways you sorted.
- D. Tell why you sorted them in these ways.

What was the answer to your problem or question? *(Example:* There are these kinds of leaves in my neighborhood: ______.) Tell whether it agrees or disagrees with your hypothesis.







ELEMENTARY COLLECTION WRITTEN REPORT FORMAT

Each line with a box (\Box) in front of is where you will begin a *new page* in the report.

. Title page

Title in middle of page

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

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D Purpose

- Acknowledgements
- □ Problem (Question) (page numbering starts here)

□ Conclusion

- 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 COLLECTION 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 computergenerated 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: <u>Problem,</u> <u>Hypothesis, Procedure, Results</u> and <u>Conclusion</u>. 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 must be used in the results 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 experiment's progress. A photo of you with your experimental set up is encouraged. All photos must be titled.

DISPLAY DIMENSIONS

- 1. When backboard (display portion) is <u>flat</u>, it should be 48 inches wide.
- 2. Side panels ("wings") should be I2 to I8 inches.*
- 3. Height should be no more than 48 inches.

REPORT POCKET

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

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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.

