



LONG BEACH UNIFIED SCHOOL DISTRICT
SCIENCE FAIR INFORMATION
For Parents and Students
Elementary Level
 Revised October 2009



Dear Parent(s) or Guardian:

The science fair project is an activity that draws upon basic and advanced skills that have been taught and emphasized in your child's science program. Students generate a science fair project and apply the scientific method to solve the problem. Your help may be needed throughout your student's project. For example, your child may ask for your assistance in the following ways:

- Conducting research via libraries or internet.
- Typing presentation materials for display.
- Retrieving necessary materials needed for their experiment.

Please go over the information presented in this student information folder and discuss it with your child. Some of the details not in the folder have been or will be discussed in class. Contact me at school with any concerns or questions.

Sincerely,

Your Child's Science Teacher

* * * * *

I have read the Science Fair Parent Letter.

Date: _____

Parent Signature: _____

Student Name: _____

(Please Print)

SCIENCE FAIR MATERIALS SOURCES

ALIN PARTY COMPANY
 4139 Woodruff Ave., Lakewood
 (562) 420-2489

CM SCHOOL SUPPLIES
 5440 E. Del Amo, Long Beach
 (562) 429-2425

HOME DEPOT
 2450 Cherry Ave., Signal Hill
 (562) 595-9200
 751 Spring St., Signal Hill
 (562) 426-4667
 5000 Hardwick St., Lakewood
 (562) 529-3500
www.homedepot.com

LOWE'S
 7300 E. Carson St., Long Beach
 (562) 421-9996
 2840 Bellflower Blvd., Long Beach
 (562) 496-8120
www.lowes.com

LYON'S ART SUPPLY
 420 E. 4th Street
 Long Beach, CA
 (562) 435-5383

MICHAEL'S CRAFTS
 4000 Hardwick St., Lakewood
 (562) 633-1913
 7320 Carson St., Long Beach
 (562) 377-0669

OFFICE DEPOT
 2301 E. Willow, Signal Hill
 (562) 427-6333

RADIO SHACK
 For a location near you, call
 (800) 843-7422

STAPLES
 3515 Atlantic Avenue, Long Beach
 (562) 427-6477
 4600 Pacific Coast Highway, LB
 (562) 597-1922
 7400 E. Carson St., Long Beach
 (562) 377-0403
www.staples.com
 1-800-378-3-2753

SOURCES FOR RESEARCH

- | | |
|---------------------|--|
| • Botanical Gardens | • Parks |
| • Industries | • Airports |
| • Nature Centers | • Commercial Nurseries |
| • Public Libraries | • Colleges and Universities (including libraries) |
| • Marine Reserves | • Zoos, Aquariums, or Wildlife Rescue Centers |
| • Animal Hospitals | • Local hospitals including research facilities and libraries |
| • Natural Museums | • Medical, Dental, or Veterinary Offices |
| • Telephone Book | • Scientific Websites |
| • Water Department | • Government Agencies (<i>Examples: Government Printing Office, Department of Fish and Game</i>) |

GRADE LEVEL PROJECT FOCUS

Students are encouraged to reflect the district standards and grade level objectives in their science projects. Students may choose projects which focus on current class content, or even preview next year's content. See on-line rubrics for details.

K - 1st Grades ONLY:

- Build a **Collection** to answer a question related to observations made while exploring their world.

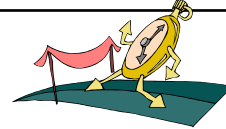
3rd – 5th Grades ONLY:

- Create an **Invention** to solve a real life problem using the Engineering Design Process.

Grades K – 5:

- **Experiment** to answer original question using the Scientific Method.
- Answer original question using in-depth **Research**.

STUDENT SCIENCE FAIR PROJECT TIMELINE



TASK	Teacher's Date Due	Teacher's Initials	Parent's Initials
1. Choose, and submit for teacher approval, a topic question/problem to investigate			
2. Do preliminary research. Collect and read books for your topic.			
3. Develop a hypothesis (your best guess) based on your preliminary research.			
4. Decide on the procedure that you will use to test your hypothesis.			
5. Make a list of your materials. Gather your materials.			
6. Conduct your experiment or build and test your invention. Compile your research or collection. Record data.			
7. Organize your data and results.			
8. Write your conclusion based on your results. Write a "real world" application of what you learned.			
9. Write a draft of your science fair report.			
10. Proofread your draft or have someone else proofread it. Type or write a final copy of your report.			
11. Assemble your science fair display board and display items.			
12. Turn in your science fair project (report, display board and display items).			
13. Take your science fair project home.			

Note: The student should keep his/her research, update sheets, letters home to parents, and other information this folder. This folder should be kept at home unless otherwise instructed.

SCIENCE FAIR WRITTEN REPORT

Scientists always write reports of their research so that others may learn from them. Your research will be shared through your written report, a project display, and an oral presentation so others may learn from you.

TITLE PAGE

- Put the project title in the center of the page.
In the lower right corner, have:
Last Name, First Name
Grade ____
Teacher Name
School Name
Date (include year)

NOTE: This same, exact information will also go in the upper right corner of your *report cover*, and on the upper right corner on the *back of the display board*.

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.

TABLE OF CONTENTS

- List each of the following sections and the page numbers for each.
- Type the page numbers at the bottom of each page.

PROBLEM

- State the problem in the form of a question.

RESEARCH

- This part of your report has information that was found by other scientists and relates to your topic.

HYPOTHESIS

- State your best guess for answering the question before you have performed an experiment.

EXPERIMENT

(This part is not needed for a Research or Collection project. For an Invention project (gr. 3), you may substitute the Engineering Design Process format.)

Include these parts:

A. MATERIALS

List the materials you used.

B. PROCEDURE

List the steps of your experiment. Do not use the words “I” or “you”.

C. DATA

Show what you observed during the experiment. Include measurements you made. You may also use drawings to help show what you observed.

D. RESULTS

Tell about your data and what you observed. Even if your data shows that your guess was not right, your project is still good.

For a collection, sort the collection in different ways and record all the ways you sorted. Tell why you sorted in these ways.

CONCLUSION

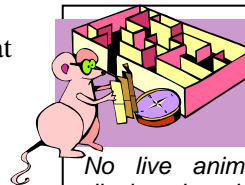
- Use two or three sentences to tell what you learned from your experiment. Was your hypothesis valid? Why or why not?

APPLICATION

- Explain how what you learned from your project is applied in the real world.

SOURCES

- List all books, articles, and other sources that you used for your research.
- Only one book may be an encyclopedia reference.
- You may also interview experts to help with your studies.



DISTRICT ANIMAL POLICY

No live animals can be used or displayed at the District Science Fair. Live animals used as part of a project must be treated humanely. Photos of animals should be used on the display board to show their participation in the research.

★ **Points to Remember:**

- 1. Type or write on one side of the paper only.**
- 2. Center the page numbers of your report at the bottom of each page.**
- 3. Have someone proofread your report before you make the final copy.**
- 4. Put report in a report cover with 3-hole fasteners.**
- 5. Turn in your original report and keep a copy at home in case the original gets lost.**



DISPLAY INFORMATION

DISPLAY BOARD MATERIALS

The display board must be sturdy and stand by itself on a table. Foam core-board and cardboard are the best materials.

COLORS

If you need to paint your display board, enamel paint works best. Do not use water-based paint. Contact paper may also be used. Use contrasting colors on your board as backing and a border for all typed material. Background color may NOT be white without permission.

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 to 4 inches high. The subtitle letters should be 1 to 2 inches high. The subtitles which are mandatory on the display board are: **Problem, Hypothesis, Procedure, Results, Conclusion, and Application**. All items on the display must be glued to the board. Do not use pins, tacks, staples, or tape.

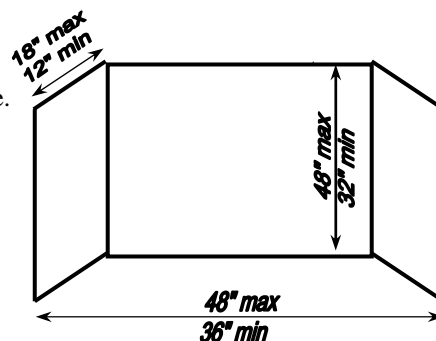
DRAWINGS, PHOTOS, TABLES, AND GRAPHS

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. They may also be scanned from the computer. Tables must be displayed in a clear, organized form. Several tables or graphs may be included on one page, as long as the format is clear and easy to read. Tables and graphs must be used in the results section. Tables and graphs should be computer-generated. All tables and graphs must have explanatory titles. Graph axes must be labeled with a description of what each axis represents and the units being represented.

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 display board is laid open and flat, it should be no more than 48 inches wide.
2. Side panels should be 12 to 18 inches.
3. Height should be no more than 48 inches.



REPORT POCKET

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

DISPLAY ITEMS

Something that represents the project should be placed in front of the board. Examples include:

- ◆ equipment or materials used
- ◆ models
- ◆ artistic representations
- ◆ samples or specimens
- ◆ simulated items

There are endless possibilities - be creative!



SAFETY CONSIDERATIONS

No part of your display may pose a safety hazard. Do not include harmful chemicals, bacterial cultures, sharp objects, or any source of heat or flames. No live or preserved animals are allowed at the LBUSD district-level Science Fair, at the Los Angeles County Fair, or at the California State Fair.

SCIENCE FAIR PROJECT CHECKLIST ✓

- ___ There are no tacks, pins, tape, or staples on the display board--- only strong glue. Make sure everything is secure.
- ___ The student's *name and other required information* are on the back of the display board in the upper right hand corner. (See instructions for Title Page of report.)
- ___ The report is in a report cover with 3-hole fasteners. The report is in a "pocket" on the front of the display board with the student's *name and other required information* in the upper right hand corner on the outside of the cover.
- ___ The student has the original report in the report cover and a *copy* at home.
- ___ Any display items other than the display board and the report are in a paper bag with the student's *name and other required information* on the outside of the bag. Bring a UL approved extension cord for displays requiring electricity.
- ___ Display items with many pieces (i.e. crystals) are not loose. They are in a display case or other "holder." No harmful materials or substances are part of the project display.
- ___ The project is completed **before** bringing it to school.