

CMP 2012
Science Fair
Thurs. 2/16 3-5pm

Science Fair K-3

Everything that you wanted to know about the Science Fair but were afraid to ask.

A student/parent guide to a successful experience!

It's that time of year again to take a look at the amazing world of science. It is our hope that you look at this as an opportunity to learn something together and have some fun! As with anything, time, plays an important role in the success of this project. Left to the last minute it can be a real nightmare. Carefully planned out, it can be a joy to all. We have laid out a plan that should help you on your way.

First, a topic should be chosen. Many students already are interested in a field of science and you could encourage them to do more research. See the attached list of science topics. This is just a sampling that we found in a book. Then we would encourage you to take a trip to the local library. Go to the science area and check out the many books available there. A trip to a local science museum might be a way to spark an interest.

At this level, (grades k-3rd) we have opened it up to more than just experiments. An experiment can be fun and sometimes it can be complicated and hard to understand. Students can make models, present collections, study topics, answer scientific questions etc. The whole idea is to introduce them to the wonderful world of science.

After the topic has been chosen, create a plan. Are you going to do an experiment? Gather your supplies. Design a rock collection? How will you present it? Students will be asked to make a presentation board where they will explain what they studied.

A word of caution... experiments that involve chemicals need to be closely monitored the night of the event. Volcanoes using vinegar and baking soda can be messy and can cause injury. Anything that is explosive in nature is prohibited and will not be allowed. If you have any questions to the safety of your experiment, ask your teacher.

GRADING

4

Student shows a high level of interest in the project. The display is well organized, colorful, neat, and has elements of student creativity. Student expresses thorough knowledge of the topic. Student shows pride in presentation. Advanced grade level evident.

3

Student shows interest in the subject. The display is organized and has some of the elements of creativity. Student understands the theme of his study. Proficient at grade level.

2

Student has put in effort and successfully completed the assignment at grade level standards. Work is somewhat neat and may have a few spelling errors.

1

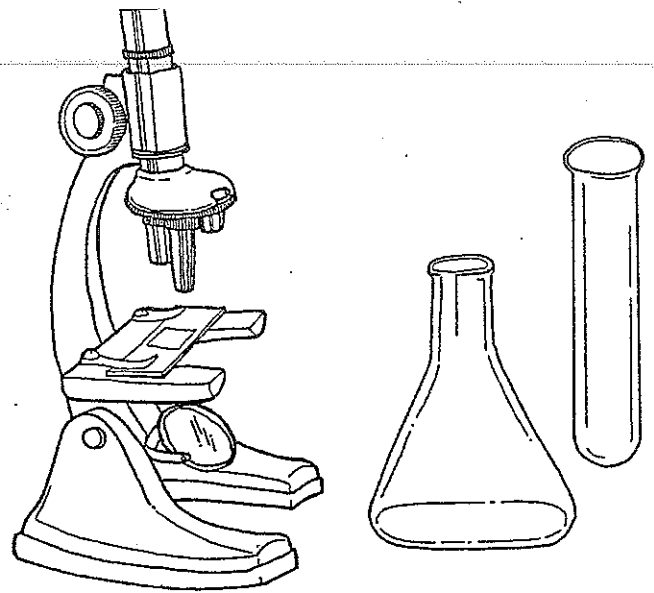
Student work is incomplete. Little or no interest in the topic is evident. Presentation is messy and lacking in effort.

0

No assignment turned in.

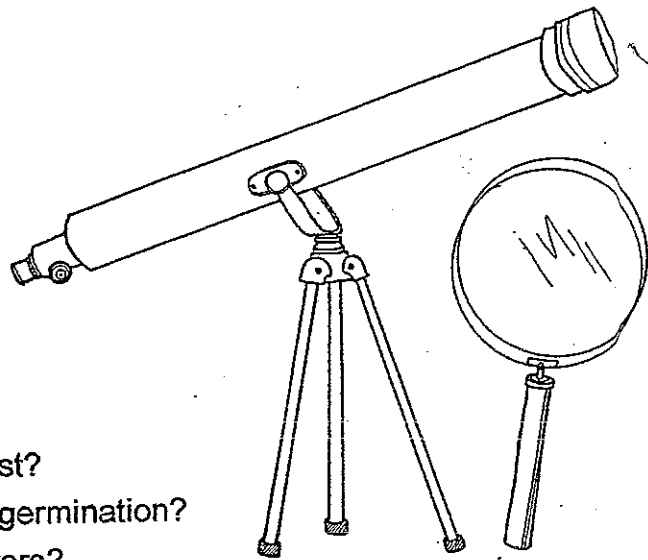
The day of the science fair, have your student bring in their display. We will set it up at the end of the day. Some classes have their students do a brief explanation to the class about their topic. Ask your child's teacher when to clean-up and take down the displays. (that night or the next day)

*ELEMENTARY
SCIENCE FAIR IDEAS
Grades K-3*



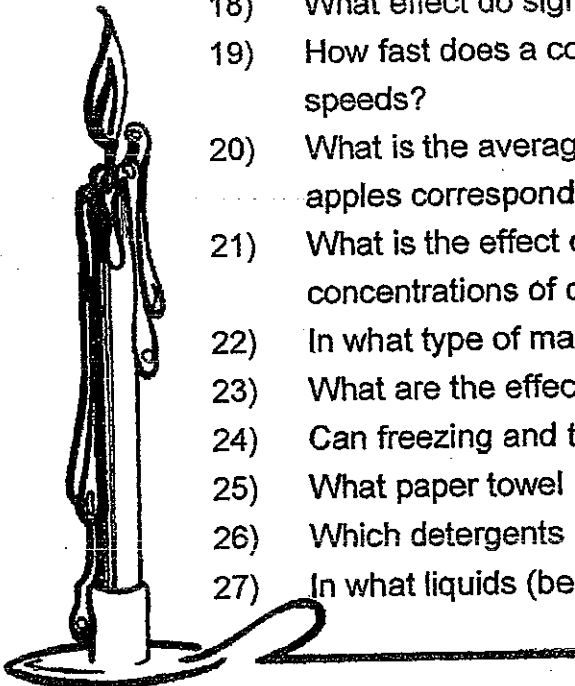
- 1) How fast does water climb?
- 2) Will nails rust in water?
- 3) What is the water cycle?
- 4) What materials will dissolve in water?
- 5) Will jars with different-sized openings effect the rate of evaporation?
- 6) What kind of soap or detergent gives the most suds?
- 7) What makes the best bubbles?
- 8) Under what conditions will seeds start growing?
- 9) How fast can different members of the land snail family move?
- 10) What are the resulting colors when two or more colors are combined?
- 11) How do different spiders spin their webs?
- 12) What kinds of insects live in your area?
- 13) What is the difference between a butterfly and a moth?
- 14) What insects are bugs?
- 15) How do scales help fish?
- 16) What is the difference between toads and frogs?
- 17) What birds do you observe around your locality?
- 18) How do nests of various birds compare?
- 19) How does a bird take a bath?
- 20) How do leaves vary in size, shape and structure?
- 21) How does a tree grow?
- 22) How can you determine the year in which various trees started to grow?
- 23) What use is bark to a tree?
- 24) How do twigs of different kinds of trees differ?
- 25) What effect does moisture have on seed growth?
- 26) What effect does light have on seed germination (growth)?
- 27) How do seeds travels?
- 28) Are you taller in the morning or at night? What about other members of your family?

*ELEMENTARY
SCIENCE FAIR IDEAS
Grades 3-5*



- 1) What is the shape of the magnetic field?
- 2) Under what conditions does mold grow fast?
- 3) What conditions affect the speed of seed germination?
- 4) How does aspirin affect the life of cut flowers?
- 5) How does the depth of planting a seed affect the growth of the plant?
- 6) How does the length of the geranium stalk affect the production of roots?
- 7) Under what conditions do water droplets form on different materials?
- 8) Will plants grow better in the sunlight or artificial light?
- 9) In what concentrations of salt water can roots grow?
- 10) How much potato plant tissue is necessary for the development of a potato bud?
- 11) What is the average number and distribution of raisins in loaves of raisin bread?
- 12) What objects can be attracted by magnets?
- 13) Under what conditions is popcorn stored best?
- 14) What common liquids are acid, base and neutral?
- 15) Does water temperature affect the time required for salts to dissolve?
- 16) What materials absorb the most water (ranking objects)?
- 17) What materials dissolve in water?

- 18) What effect do sight and smell have on taste?
- 19) How fast does a common garden snail travel? What affects these speeds?
- 20) What is the average number of seeds in an apple? Do the sizes of the apples correspond to the number of seeds?
- 21) What is the effect of watering a certain type of plant with different concentrations of detergent?
- 22) In what type of material do plants grow best?
- 23) What are the effects of chlorine on plant growth?
- 24) Can freezing and thawing break rocks?
- 25) What paper towel is really most absorbent?
- 26) Which detergents break up oil best?
- 27) In what liquids (besides water) can bean seeds be germinated?



** You may choose to use this form or the "Scientific Method" page. **

My Science Fair Project

Name: _____

Date: _____

Project Title: _____

Please use complete sentences and your own words
to answer the following questions:

What is your project or experiment is all about?

Why did you choose this topic?

My Science Fair Project (continued)

Please use complete sentences and your own words to answer the following questions:

What are three things that you learned?

What was the most interesting thing you discovered by doing this project or experiment?

Self-Evaluation

I think I earned a 4. My project was well-organized, colorful, and in my best handwriting (or I typed it). I used pictures and tried to draw some on my own. I learned a lot and I understand this topic. My answers were in complete sentences. I a man expert on this topic!

I think I earned a 3. My project was interesting, well-organized, and in my best handwriting (I typed it) I used some pictures. I learned some new things about my topic. My presentation board looks nice.

I think I earned a 2. My project looks OK. I learned a lot about my topic. I could have been neater with my handwriting. My pictures and information on the board could have been presented in a manner that would have shown more effort and pride in my work.

I think I earned a 1. I was rushed and make time to do a god job. My work is incomplete.

I think I earned a 0. I did not turn in an assignment.

Scientific Method (continued)

Please use complete sentences and your own words to answer the following questions:

Observations (What did you see? Please be specific and detailed in your responses):

Analyze and Conclude (What happened? Why do you think this happened?):

Self Evaluation

I think I earned a 4.
My project was well-organized, colorful, and in my best handwriting (or I typed it). I used pictures and tried to draw some on my own. I learned a lot and I understand this topic. My answers were in complete sentences. I am an expert on this topic!

I think I earned a 3.
My project was interesting, well-organized, and in my best handwriting (or typed) I used some pictures. I learned some new things about my topic. My presentation board looks nice.

I think I earned a 2.
My project looks OK. I learned a lot about my topic, but I could have been neater with my handwriting and the presentation of my pictures and information.

I think I earned a 1.
I was rushed and made time to do a good job. My work is incomplete.

I think I earned a 0.
I did not turn in an assignment.

** You may choose to use this form or the "My Science Fair Project" page.**

Scientific Method

Name: _____

Date: _____

Experiment Title: _____

Materials needed: _____

Please use complete sentences and your own words
to answer the following questions:

Hypothesis (an educated "guess"...What do you *think*
will happen?):

Procedure (steps to perform the experiment):

1. _____

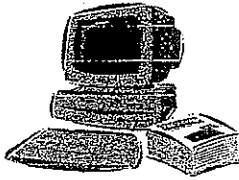
2. _____

3. _____

4. _____

5. _____

ELEMENTARY
SOURCES FORMAT
(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/askbiologist/research/scurvy/index.html> (8 Mar. 2001)

Interview

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

