Science Fair Information

Completing a Science Fair Project is optional for all K – 2 students and grade 3 students will complete in class small group projects. Students in grades 3 are welcome to do an individual project at home, in addition to their in class project. Although the steps may seem complicated, the more exposure and practice the students receive on the scientific process, the easier it will be when they get to 4th and 5th grade and are required to do a more complicated individual project. Attached are some descriptions of each step in the scientific process, guidelines that may be helpful, and space for your child to make notes on each step as he/she completes the process. Each of these steps will need to be included on the final backboard display that will be submitted on March 24, 2010.

Please mark you calendars so that you can attend the night program on March 25, 2010 from 6:30–8:30 PM. There will be a scavenger hunt, a drawing for a science prize as well as science related activities in the cafeteria.
Follow the Scientific Method

Testable Question: Something you want to find out. There should be only one thing that you change in your experiment (called the variable).

A question can take the form of:

☆ What if…?
☆ How…?
☆ What effect does …. have on…?

My question is: ________________________________
_____________________________________________________________________________
_____________________________________________________________________________
**Hypothesis:** The best guess that can be made about the outcome of the experiment. It is helpful if you can read about the topic with your child (do some research).

I think ________________________________

_____________________________________

because ______________________________

_____________________________________

_____________________________________

_____________________________________
**Materials:** What you used to complete the experiment. The materials list should include the material and the amount or size that was used. BE SPECIFIC!!!!!

Examples: 50 mL of water
3 plastic cups (12 oz. size)
30 g of salt

The materials I used were:

__________________     ___________________
__________________     ___________________
__________________     ___________________
__________________     ___________________
__________________     ___________________
__________________     ___________________
Procedure: A numbered list of steps taken to complete the experiment.

★ Should be thorough and complete
★ Show that only one thing was changed in the experiment
★ Show that you repeated the experiment three times and found an average

Procedure:
1. __________________________________________
   __________________________________________
2. __________________________________________
   __________________________________________
3. __________________________________________
   __________________________________________
4. __________________________________________
   __________________________________________
5. __________________________________________
   __________________________________________
**Results:** Data that were collected or observations that were written should be displayed. (a possible data chart **and** bar graph paper are included). Both the data chart and the bar graph should be displayed on the backboard.

Results can be displayed using:

- Charts
- Graphs
- Photographs

<table>
<thead>
<tr>
<th>In this column, you should list the thing that you changed in the experiment.</th>
<th>1st Try</th>
<th>2nd Try</th>
<th>3rd Try</th>
<th>Average</th>
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**Conclusion:** The conclusion should answer the question that started the investigation.

The conclusion should:

☆ Tell whether your hypothesis was correct
☆ Restate the original question
☆ Include a summary of what you found out in your experiment
☆ Use the data and make some observations about what you discovered
☆ Tell what you might like to explore further in future experiments

**My conclusion:**

In this experiment I found out that ____________

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

___________________________________________________________________
My hypothesis __________ correct
because ____________________________
____________________________________
____________________________________
____________________________________
____________________________________

From the data I collected, I can see that ____
____________________________________
____________________________________
____________________________________
____________________________________

When I do another experiment, I might like to
____________________________________
____________________________________


Ideas for Science Fair Projects

Below is a list of ideas that may be helpful to you.

1. How much salt does it take to float an egg?
2. Can the design of a paper airplane make it fly farther?
3. How long will it take a drop of food coloring to color a glass of still water?
4. Does warm water freeze faster than cool water?
5. Will bananas brown faster on the counter or in the refrigerator?
6. Which paper towel is the strongest?
7. Does a ball roll faster on grass or dirt?
8. Which type of water evaporates the quickest: salt, fresh, or tap water?
9. Which boat shape can support the most weight?
10. Does the direction a seed is planted effect the growth of the seed?
11. Does an ice cube melt faster in air or water?
12. Which brand of popcorn pops the most kernels?
13. Which brand of diaper holds the most water?
14. Does a plant grow bigger if watered by milk or water?
15. What gets warmer—sand or dirt?
16. What keeps things colder—plastic wrap or aluminum foil?
17. Which dish soap makes the longest lasting suds?
18. Does color effect how fast an ice cube melts?
19. Does the height of a hill effect how far a ball will roll?
20. What kind of container will allow hot water to stay hot longer?