

# High Peaks Elementary

## 2009 Science Fair



### Schedule

Friday, September 25 <sup>th</sup>	<b>Packets go home</b> in Friday Folders.
Thursday, October 1 <sup>st</sup> & Monday October 5 <sup>th</sup>	<b>Research Hour</b> in the Library. Science Fair books will be available to review for ideas. Library will be open from 3- 4 p.m.
Friday, October 9 <sup>th</sup>	<b>Signed project proposals are due</b> to the teachers. Please turn in the <b>Parent Volunteer</b> forms along with the project proposal. <b>Last day to order Science Fair Boards.</b> Order forms are in this packet.
Thursday, October 15 <sup>th</sup>	<b>Science Fair Boards go home</b>
Wednesday, November 4 <sup>th</sup> – Thursday, November 5 <sup>th</sup>	<b>Projects delivered to the school.</b>
Thursday, November 5 <sup>th</sup>	<b>Set Up Committee</b> works setting up tables with paper covering and labels by grade level, 12:30 – 3:30 p.m. <b>Classes bring their projects</b> to set up in the afternoon. <b>Open House</b> for families to view all the projects, 6:30 – 7:30 p.m. <b>Open House Schedule:</b> Students will follow the schedule below to present their projects to parents and visitors. <b>Grades K – 3</b> 6:30 – 7:00 <b>Grades 4 – 5</b> 7:00 – 7:30
Friday, November 6 <sup>th</sup>	<b>High Peaks Science Fair 2009.</b> <b>Judging will take place from 8.30 – 11.30</b> <b>Take your project home</b> by 3:00 p.m. <b>Take-down committee</b> will take down tables: 3:00-4:00 p.m.

# Calling All Student Scientists Interested in Science Fair!!!

The High Peaks Science Fair is fast approaching.  
The Science Fair will be the week of November 2<sup>nd</sup>.

**All High Peaks Students are encouraged to participate in the  
Science Fair.**

Remember it is mandatory for all 3<sup>rd</sup> and 5<sup>th</sup> graders (you have to do one) but optional for Kindergarten, 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> graders (you can if you want).

Please read the attached information with your child and be sure to keep the Project Proposal Form and Parent Volunteer Form in a safe place so that you can turn it in by the deadline!!!

**Important: Please note the district guidelines about display of water, soil, acids, bases, organic matter, people in pictures, etc. on page 3 of this packet. To avoid disappointments on the day of the Science Fair, all district guidelines must be strictly followed. Thanks for your help with this!**

## Project Proposal Forms

Please complete the attached Project Proposal form and return it to your teacher by Friday, October 9, 2009. Classroom teachers will review your project to make sure that it meets all of the applicable school and district guidelines. If problems with your project are noticed, you will be informed in a timely manner so that you can either modify your project or choose another one.

## Project Ideas

For project ideas, please visit the High Peaks library during research hour. Your local library is also a great source for ideas. You can also try the following web sites:

[www.science-ideas.com/elementary-projects](http://www.science-ideas.com/elementary-projects)

<http://www.ipl.org/div/projectguide/>

<http://school.discoveryeducation.com/sciencefaircentral/>

<http://www.rossarts.org/naples/ideas.htm>

## Questions

If you have questions, please contact Meena Raghavan, the Talented and Gifted Education Advisor, at 720-561-6539 or by e-mail at [meenakshi.raghavan@bvsd.org](mailto:meenakshi.raghavan@bvsd.org)

## ELEMENTARY SAFETY DISPLAY GUIDELINES

Please remember that no liquid or organisms of any kind, ***including water and plants*** may be displayed at the Science Fair. Anything which could be hazardous to the public, the exhibitor, or other exhibitors is PROHIBITED.

Organisms: **No organisms may be displayed. For example:**

Vertebrates-

- No owl pellets
- No mice, live or dead
- No skeletons
- No fish, live or dead

Microbial cultures-

- No fungi, live or dead
- No bread molds, bacteria, viruses, viroids, prions, rickettsia, live or dead
- No parasites, human or other, live or dead

Invertebrates-

- No worms, live or dead
- No insects, live or dead

Plants- No plants

Chemicals: **No chemicals may be displayed. For example:**

- No acids, dilute or strong
- No bases, dilute or strong
- No salt solutions
- No insecticides
- No repellents
- No mercury

Flammable substances: **No flammable substances may be displayed. For example:**

- No gases
- No solid rocket fuel
- No flammable liquids
- No fumes

An alternative solution to displaying the above items: Take photographs of the substances that were used or use a digital camera and create large pictures with a computer printer for display on your board.

**Electricity:** If your project requires electricity, you **MUST** indicate it on your proposal and you **MUST** bring your own extension cord.

## *Oral Presentation:*

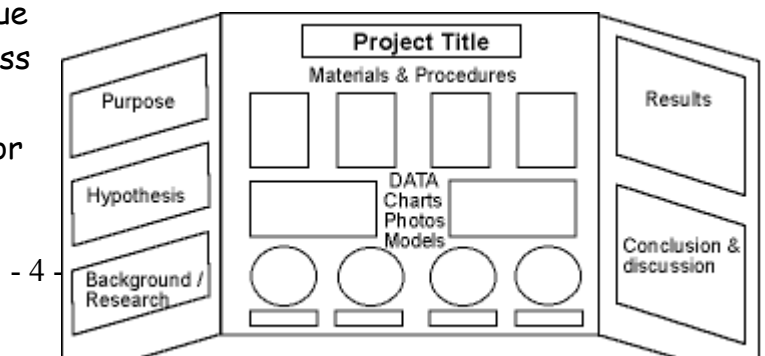
Students who are required to make an oral presentation to their class will find this good practice as they prepare to present to the interviewers at the science fair.

- Practice by presenting your project to your family. Speak clearly and slowly.
- Give the title of your project; explain your hypothesis and why you were curious in the first place. Explain the procedure of your experiments and how you obtained the data. Briefly discuss your results and give a conclusion to your presentation.
- Be prepared to answer some questions about your project such as:
  - What things did you find out by doing this project?
  - How did you get interested in your topic?
  - What kinds of difficulties did you have to deal with? Did anything go wrong?
  - Were you surprised by anything that happened?
  - If you had it to do all over again, what might you do differently?
  - Are there areas of this topic that you'd like to learn more about?
  - If you had more time how might you continue to explore or expand your project?
  - What do you think is the best thing about your project?

## *Visual Display:*

Sometimes it is the little things that capture the interviewer's eye. They can make the difference between an exciting and eye-catching project and one that doesn't quite make it. Follow these tips to make your project extra special.

- Make sure you can see your project from a distance by making the lettering for your various headings large enough to be read from a distance. Perhaps you can make your titles on a computer - then you can make them any size you want. Use simple easy to read fonts. If you print your titles by hand, do it neatly so everyone can read them.
- Choose your pictures carefully. Use tables, charts, graphs, and photos whenever possible.
- Make colored backgrounds for your pages. Use colored paper as a background frame for each page of your report. Make sure you have no misspelled words or mistakes anywhere. Lay it all out on the floor before you glue anything to your display board. Neatness counts.
- Include a folder with all of your notes or data collected and calculations. You



should be able to show all of your work even if it is not on your display board.

- Be sure to include the following items on your display board:

Your title, name, grade, and teacher

Your question, hypotheses and data

Your materials and procedure

Your results and conclusion

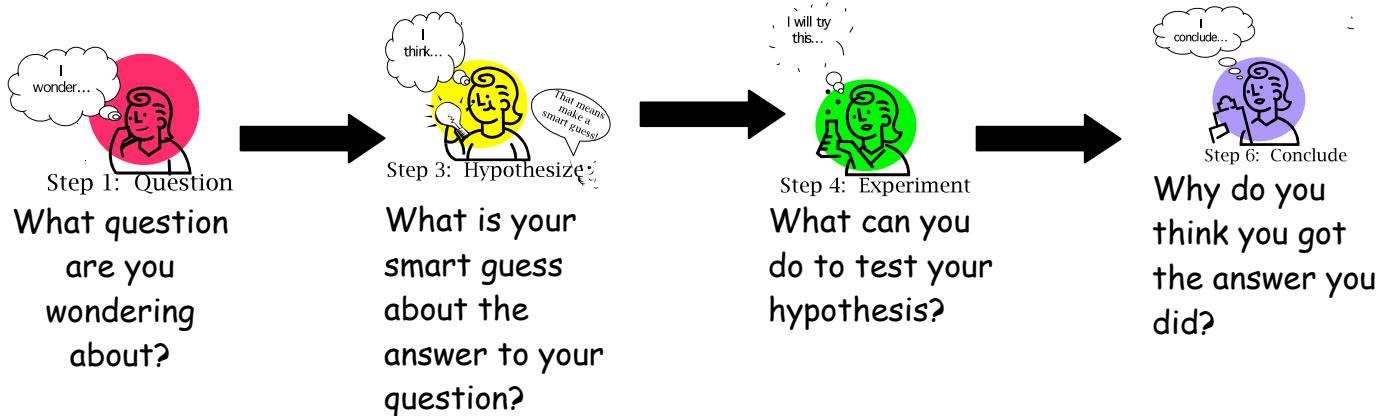
Sample Display Board

Dimensions: 36" \* 48" (Maximum)

# The Scientific Method

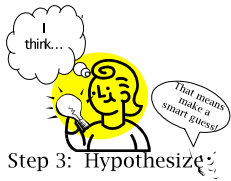
Your child has learned the scientific method at school and will have a chance to apply it with their science fair project. Below is a description of how each grade level will use the method in their project.

## Kindergarten-2<sup>nd</sup> Grade



## 3<sup>rd</sup>-5<sup>th</sup> Grades





Step 3: Hypothesize

What is your guess about the answer to your question?  
Predict an outcome.



Step 6: Conclude

Do your observations support your hypothesis? Why?  
If they do not, that is ok. Why don't they?



Step 4: Experiment

Plan and do an experiment to test your hypothesis.  
Check the results of your experiment against known facts.

Science Fair Project Proposal  
(Due Friday, October 9, 2009)

Student Name: \_\_\_\_\_

Project Title: \_\_\_\_\_

Grade Level: \_\_\_\_\_ Teacher: \_\_\_\_\_

Circle your science category (please note that 5<sup>th</sup> grade students are strongly encouraged to do a chemistry project: contact your teacher if you have another idea that you might like to explore)

- |                            |                  |                          |         |
|----------------------------|------------------|--------------------------|---------|
| Behavioral/social sciences | Biochemistry     | Botany                   | Zoology |
| Chemistry                  | Computer Science | Earth and Space Science  |         |
| Environmental Science      | Engineering      | Mathematics              |         |
| Microbiology               | Physics          | Medicine/Health Sciences |         |

Statement of Problem or Hypothesis: (what question are you trying to answer?)

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Procedures: (what steps do you need to take to answer your question?)

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Materials: (what materials will you need to use to test your hypothesis?)

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Do you need electricity? \_\_\_\_\_ You will need to bring an extension cord.

Student's  
signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parents: Please sign to indicate that you have read the entire High Peaks Science fair Packet including the BVSD Safety Display Guidelines and that you will help your child follow these guidelines.

Parent's  
signature: \_\_\_\_\_ Date: \_\_\_\_\_

Teacher's  
approval: \_\_\_\_\_ Date: \_\_\_\_\_

Comments:

Due Friday, October 9, 2009

## Calling all parents!

In order to make our best science fair yet we need many parent volunteers.

### “Many hands make light work”

So please take a moment and pick one task on this list that you can help with and send this form back to school with your child by Friday, October 9, 2009.

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Child's Name: \_\_\_\_\_ Teacher: \_\_\_\_\_

e-mail address: \_\_\_\_\_

**Please choose at least one way you can help. If both parents want to help, please write the first name next to the job.**

\_\_\_\_\_ **Interviewer:** You don't have to be a rocket scientist but we will take a few of those too!! Be at school on Friday, November 6<sup>th</sup> from 8:00 to 11:00 a.m. Orientation is included that morning (as well as bagels and drinks.) Parents will be Interviewers of children in grades other than their child's grade level.

\_\_\_\_\_ **I know someone who may be interested in Interviewing.**

His/Her name is: \_\_\_\_\_ and can be reached at \_\_\_\_\_

\_\_\_\_\_ **Hospitality Committee:**

\_\_\_\_\_ **Family Open House Monitor:** Thursday, November 5<sup>th</sup>.

Work 6:00 – 8:00 p.m. The Open House is 6:30 – 7:30 p.m.

\_\_\_\_\_ I can volunteer from 6:00 – 7:00 p.m.

\_\_\_\_\_ I can volunteer from 7:00 – 8:00 p.m.

\_\_\_\_\_ **Orientation/interviewers' reception:** Friday, November 6<sup>th</sup> from 7:30 a.m. to 11:30 a.m. plus some earlier food prep work.

\_\_\_\_\_ **Set-Up/Take-down**

\_\_\_\_\_ **Set-up:** Thursday afternoon, November 5<sup>th</sup>; work a couple of hours between 12:30 and 3:30 p.m. (Any dads available to set up tables at 12:30???)

\_\_\_\_\_ **Take-down:** Friday, November 6<sup>th</sup> from 3:00 to 4:00 p.m. Take down tables (Any dads available???)

\_\_\_\_\_ **Help with copying** of interviewer packets or other materials during the month of October.

\_\_\_\_\_ **Help with data entry** and printing of labels and certificates.

\_\_\_\_\_ **Help with Science Fair Board Sales** – work for a couple of hours on October 15<sup>th</sup> sorting through orders and sending boards home.

Thank you!!!

**Science Fair Board Order Form**  
**Please fill a separate order form for each student**

Student Name: \_\_\_\_\_

Teacher: \_\_\_\_\_

Cost of Boards:    White - \$4.00,  
                          Color - \$5.00

Please circle a color:

1<sup>st</sup> Choice - White, Red, Light Blue, Green, Black, Yellow

2<sup>nd</sup> Choice - White, Red, Light Blue, Green, Black, Yellow

Please return completed order forms along with payment to your child's teacher. Make checks payable to High Peaks Ed. Group. Last day to order is Friday, October 9, 2009. Boards will be sent home on October 15, 2009.

Please note that Display Boards are also available at local craft stores.

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