

Parents of Science Fair participants at Lehi Elementary –

The Science Fair is on January 30th and 31st, and hopefully your student is thinking seriously about how to put their project together. Here is some very important information to help you in guiding them:

- The fundamental steps of a science fair project are: 1) Ask a Question, 2) Do Background Research, 3) Construct a Hypothesis, 4) Test Your Hypothesis by Doing an Experiment, 5) Analyze Your Data and Draw a Conclusion, and 6) Communicate Your Results on Your Project Board. This was communicated to them at the kick-off assembly, but please re-iterate the steps they need to complete.
- Students' projects will be judged on their merits and in comparison with other students of their same grade. There will be 1st, 2nd, and 3rd prizes awarded in each grade (4th through 6th), with trophies and prizes accompanying each. Six honorable mentions will also be awarded to fifth and sixth grades, three each. The top six projects from the fifth and sixth grades will be able to compete in the district science fair about two weeks after Lehi Elementary's. If you want specific information as to how they will be judged or ways in which individual projects can excel, please see below.
- A copy of the original registration form is on the school's website at http://lehi.alpineschools.org/wp-content/uploads/2013/01/SCI_FAIR.pdf. Don't forget the rules listed under the Announcement section of the school's website as well. There are many links providing ideas and guides listed on the back side of that original instruction form, but one of the most helpful is sciencebuddies.org.
- Students can set up projects the afternoon of Thursday the 30th, from 2:30 to 3:30, or from 8 to 9 a.m. the morning of Friday the 31st. Students need to take down projects at 2:25 Friday afternoon, quickly, so that they can attend the awards ceremony at 2:30 and take their projects home with them at the end of the school day. You can help, if necessary.
- You are encouraged to bring family members and friends to view all of the projects at the fair from 3:30 to 7 on the 30th or from 9 a.m. to 12 p.m. the day of the fair. Judging will take place after that.
- Let your kids know that there are trophies to be won, as well as awesome science prizes that they can win. These prizes will include science toys, kits, and experiences.
- Please email Jamie Moesser at jmoesser@hotmail.com if you have any questions, or are available to volunteer during any portion of the fair.

The students will be judged on how well they:

- presented a question that can be answered through research and/or observation that the student did not know the answer to already.
- created a plan for how their question would be answered.
- used at least 2 sources of background information (books, internet, magazines, etc.) relevant to their question.
- followed their plan of research and/or observation. The student recorded all their research, observations and thoughts in a lab book, which is required for 5th and 6th graders, not required for 4th.
- drew conclusions from well-organized research or observation notes.
- related research and observations back to the original question.
- identified clearly and explained key scientific concept(s) relating to the research/observation.
- learned something new.
- prepared a project board that shows the students questions(s), how they found answers, and their answers and conclusions? Did the student use a pleasing display that showcases the project and highlights the results? (Title, Question, Results) Are the important points of the project easy to find and read? Was the student able to clearly explain their project and what they learned?

Lehi Elementary
Science Fair 2014
Rules:

1. A one-paragraph description of your project, listing the question you plan to answer and the experiment you plan to do to answer that question, are due by January 10, 2014 to your teachers. Please use good judgment as to the propriety of your topic. If a subject or methodology is deemed appropriate by the administration of the school, district, or science fair, the student(s) will be informed at that time.
2. Your display board must show, among other things: 1) your name and the names of your team members if you do it as a team project, 2) captions that include the source for all research and background information, 3) a list of what equipment was used to do your experiments.
3. There is a difference between experimenting on animals and observing their behaviors in their natural environment. The latter is allowed; the former is not. Usually insects are not of too much concern. Behavioral experiments are allowed as long as no harm (physical or psychological) comes to the animal.
4. No explosives of any kind are allowed at the fair.
5. Think safety first in every step of planning and doing your experiment. Make sure you have recruited your adult (age 18+) to help you. If there are dangerous aspects of your experiment, like using sharp tools or experimenting with electricity, please have an adult help you or have them do the dangerous parts. Parents or adult supervisors cannot do the experiment for the student(s).
6. Wear protective goggles when doing any experiment that involves pieces that could fly around, heat, or chemicals.
7. Do not taste or inhale chemicals or chemical solutions.
8. Projects that involve drugs, firearms, or explosives are not permitted.
9. Projects that break district policy, and/or local, state or federal laws are not permitted.
10. Use safety on the internet! Never write to anyone without an adult knowing about it. Be sure to let an adult know about what websites you will be visiting, or have them help you search.
11. Experimenting or inventing with household currents (100v or higher) is not allowed unless under the supervision of a qualified electrician.
12. Open flames should be avoided. They can only be used under adult supervision with proper safety gear, and cannot be used in the presentation, *ever*.
13. Slightly corrosive chemicals (cleaners, mild acids and bases) can be used, but must be completely contained if brought in to show at the presentation.
14. The administration and science fair committee reserve final interpretation of the rules, and their decisions are final.
15. Parents may help their students set up their projects after school on January 30th or between 8 and 9 a.m., on the 31st, and need to either help transport the project and student home by 3:45 p.m. on the 31st, or make sure that the project is in such a form that the student can take their project home with them on the bus.
16. Displays must be on display boards or cardboard no wider than 48" and no taller than 36".

Recommendations:

- Always wash your hands after doing the experiment, especially if you have been handling chemicals or animals.
- Experiments are recommended over collections, demonstrations, and models, and will be scored higher as such. Experiments will also be judged on the use of the Scientific Method.
- You cannot perform your experiment at the science fair; it must be done before-hand. You will only be judged on your presentation and board. You can however, mount things on your board in a type of 3D display, but remember that your board has to be able to stand by itself, so don't get carried away. Keep things small or light-weight and dry. Be prepared to explain your project to the judges, in about five minute, and to answer their questions.
- Please respect all adults and other students involved in the fair.

Lehi Elementary Science Fair

Thur., Jan. 30th 5 – 7 p.m. & Fri., Jan. 31, 2014

8:00 a.m. – 3:30 p.m.

- ∑ **Who can participate:** all 4th through 6th graders. Sixth graders will be required to participate.
- ∑ **Why you should participate:**
 - ∑ to have a chance to do hands-on science experiments, with or without your friends.
 - ∑ to try to get 1st, 2nd, or 3rd place or honorable mention for your grade.
 - ∑ to win a spot on the team that will advance to district and regional science fair competitions.
- ∑ **How to participate:**
 - ∑ Attend the science fair kick-off assembly at school on December 13th.
 - ∑ Have your parent or guardian sign this permission slip, then **return it to your teacher by December 20th**.
 - ∑ Go to lehi.alpineschools.org and click on the science fair link to find rules and links to many, many ideas.
 - ∑ Come up with an idea to test and submit a short plan for it **by January 10th**.
 - ∑ Do your experiment, make a project board about it, and set it up on **January 30th or 31st**.

Parents: We would love to have your 4th, 5th, or 6th grader participate in our upcoming science fair, so that they can have a fun, hands-on science experience. There is no fee to participate in the fair, but there may be costs associated with conducting experiments and presenting project results. How much or how little is spent is up to you. There are many projects that can be done with little expense. What is needed if they are to participate? The following:

Your permission:

Student name _____ Grade _____

Teacher _____

My child will be participating in the 2013 Lehi
Elementary Science Fair.

Parent Signature _____

Your payment: This year, the school will provide project boards to participating students, for a fee of \$2.50 made payable to Lehi Elementary and turned in with their project plan, no later than January 10th.

Your help: Help your student visit any of the sites below to get ideas for projects. Basic requirements are that they choose a question, problem, or hypothesis that can be tested, conduct experiment(s) at home or in "the field," measure and chart the results, and present the results with posterboard, pictures, charts, and demonstrations on January 31st at the school. Also, you will need to be available to help them transport and set up their project either after school on the 30th or between 8 and 9 a.m. on the 31st, and take down/transport it home between 3 and 3:30 p.m. that day. Send an email to jmoesser@hotmail.com if you have any questions.