

Stone Ranch's 2nd Annual Science Fair

GEMS (Gifted and Extremely Motivated Students) recommended activity

Information regarding grade level science standards for California may be accessed at:
<http://www.cde.ca.gov/be/st/ss/documents/sciencetnd.pdf>

We are thrilled to announce the 2nd Annual Stone Ranch Elementary School Science Fair. It will be taking place Monday, February 27th - Thursday, March 1st, 2012. The Fair is open to all students (K -5th). Please read the rules and guidelines in this packet. **The registration form at the bottom of this page must be turned into the office by January 20th.** The form at the bottom of page 4 must be attached to the **FRONT** (not the back) of your project in order to be admitted to the Science Fair. **READ THIS ENTIRE PACKET VERY CAREFULLY FOR INFORMATION.**

A few students will be selected for the **Stone Ranch Super Scientist Award!** **Gold Medals** will go to these few select students! There will be six Exemplary Projects awarded with **Silver Medals**. There will also be 3 Honorable-Mention **Bronze Medals** per grade level. Each participant will receive a certificate of participation. If you still have questions after reading these instructions, please contact Mrs. Venolia or Mrs. Auten. Have fun while you expand your knowledge and we'll see you at the fair.

Date: Monday, February 27th - Thursday March 1st 2012

Where: The SRES Theater

Monday February 27th	Tuesday February 28th	Wednesday February 29th
7:30 AM Parents and students may begin bringing in projects to set up on the tables in the Theater.	Set up MUST be complete by 7:45 AM	8:15 AM-12:30 PM Classes may view projects
	7:45 AM – 10:00 AM Science Fair Projects are judged. Awards placed on the projects	12:30-7:30 PM Family and Friends may view science projects.
2:30-3:30 PM Students and parents set up science fair projects on tables in Theater	10:00 AM-2:30 PM Classes may view projects	Thursday March 1st 7:00-7:45 and 2:30-4:00 PM Students and Parents must remove science projects from the Theater.
	5:30 PM-7:00 PM Family and Friends may view science projects	

(Cut here)

SRES Science Fair Registration

Please return to the office by Friday, January 20th, 2012. Print Clearly.

Names for certificates are copied from this form.

Name _____

Grade _____ Teacher _____ Room # _____

My Project is in this category: (Please circle one)

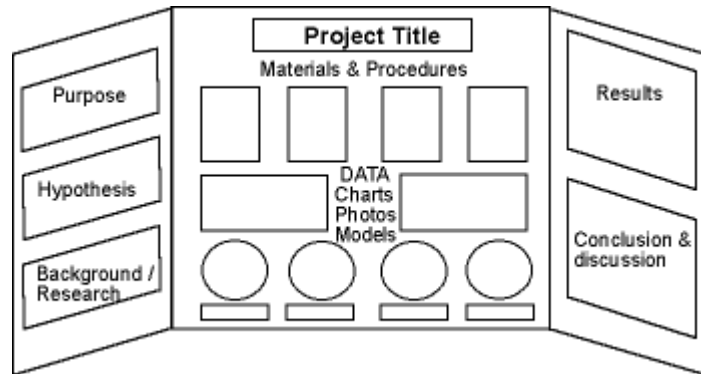
Life Science

Physical Science

Earth Science

Science Fair Guidelines and Rules

- Size limit: 36" x 48". (This is a standard display board). It must stand on its own. While a display board works well, it is not a requirement. You may also cut a display board across the width and share the other half with a friend. Below is an example of a display board.



- Choose one of the three categories: Earth Science (geology, meteorology/weather), Life Science (biology, botany, zoology), or Physical Science (chemistry, physics, astronomy - not to be confused with astrology).
- No open flames, dangerous chemicals, or live animals allowed.
- If you need electricity, you must provide your own LONG extension cord. You will be limited to a certain area of the Theater.
- Projects should be completed by the student. Parent support and engagement is welcome as long as the learning and work that takes place in the project is that of the student. (Please see the Guidelines for Parent Involvement section.)
- Judges may call students to the Theater if they have a question. Otherwise, the project should explain itself on its own and students will remain in their classrooms during judging.
- Projects are expected to stay in the Theater until 7:30 PM on Wednesday, February 29th, so that friends, family and classmates may view them all.
- Projects will be set up according to grade level.
- Students may work in pairs or in groups even if they are from different grades. The project will be placed for the judging in the highest grade level of the members of the team.

THE THREE SCIENCE AREAS

Choose a science area for your project. You are encouraged to review your grade level standards for ideas. *Make sure you circle that area on your registration form, which must be attached to the front of your project for judging.*

Earth Sciences are concerned with how our planet works and how it came to be the way it is. It includes geology (the study of the earth's crust, rocks, fossils, etc.) and meteorology (the study of weather).

Life Sciences include the study of living things on the earth and their life processes. Biology fits into this category, as does Botany (the study of plants) and Zoology (the science that deals with animals).

Physical Sciences include Chemistry, Physics and Astronomy (not to be confused with astrology, which is not one of our sciences). These are the most highly developed of the sciences and have a close relationship with mathematics. Physics includes the study of matter, motion, electricity, and magnetism. Astronomy is the study of planets and outer space. Chemistry is the study of properties and reactions of matter, particularly at the level of atoms and molecules.

What is the Scientific Method?

The Scientific method is what scientists use to learn about things.

It has four major steps:

- ✓ **State the problem.** What is it that you want to find out? *Example: Do plants need sunlight?*
- ✓ **State your hypothesis.** What do you think is going to happen, or how do you think it works? *Example: If two plants are given the same good care, except that one is kept in a dark box, it will not grow as well as the one kept outside.*
- ✓ **Record your data.** Write down or take pictures of what happens when you try your experiment. NOTE: Keep track of your data; it will be exciting to see if your guess was right. *Example: Two daisy plants were bought. One was kept in my bedroom window; the other was kept inside a foil covered toy box. Each plant was watered every other day. Each plant was measured every week. After four weeks, the one in my window grew an inch and made three flowers. The other plant shriveled and almost died.*
- ✓ **State your conclusion.** Did what you expect happen? What did you learn? NOTE: Your conclusion should tell us what your data showed us. *Example: Light is very important for plants to grow and bloom.*

Guidelines for Parent Involvement

The Science Fair is designed to help your child develop the ability to explore and investigate a scientific topic in depth and use the scientific method. The process will allow each student to integrate writing, math, science and other curriculum areas. We hope the Science Fair will be a fun and unique way for your child to engage in learning and to explore science in more depth. All science fair projects should be grade appropriate and should be authentic work of the student.

While the Science Fair is designed for your child's benefit we wanted to share with you how much and what type of parental involvement and input is permitted.

- Parents may assist their child in creating a visually appealing display. For example, parents may help with measuring, cutting, pasting, gluing and placement of work on display board. ***The work, however, should be that of your child.***
- The research, design, and investigation should be completed primarily by the student. The parent's role is to provide the resources and direction necessary while also being a constant source of encouragement, questioning and support. While you are welcome to be involved we ask that you think about how much of the work is your child's versus your work. Obviously, younger students need more support and help and this is to be expected. Again, the goal is to get your child interested and engaged in science and experiments so use your judgment on the appropriate level of support.
- Topic selection should be that of your child but parents are welcome to offer suggestions and encourage exploration of topics they might not consider. Again, please make sure the topic is grade appropriate.
- Parents are welcome to proofread a student's work, but corrections should be made by the child.

In short, a good rule of thumb is to think about the learning your child is engaged in. Sometimes the best learning comes from making a mistake or designing a project that may not end up the way that is expected. While everyone gets a certificate for participating, the true winning comes with the learning that will take place with your child.

Cut here and attach to the FRONT of your project. Print CLEARLY.

SRES Science Fair Project Information

Name _____

Grade _____ Teacher _____ Room # _____

My Project is in this category: (Please circle one)

Life Science

Physical Science

Earth Science