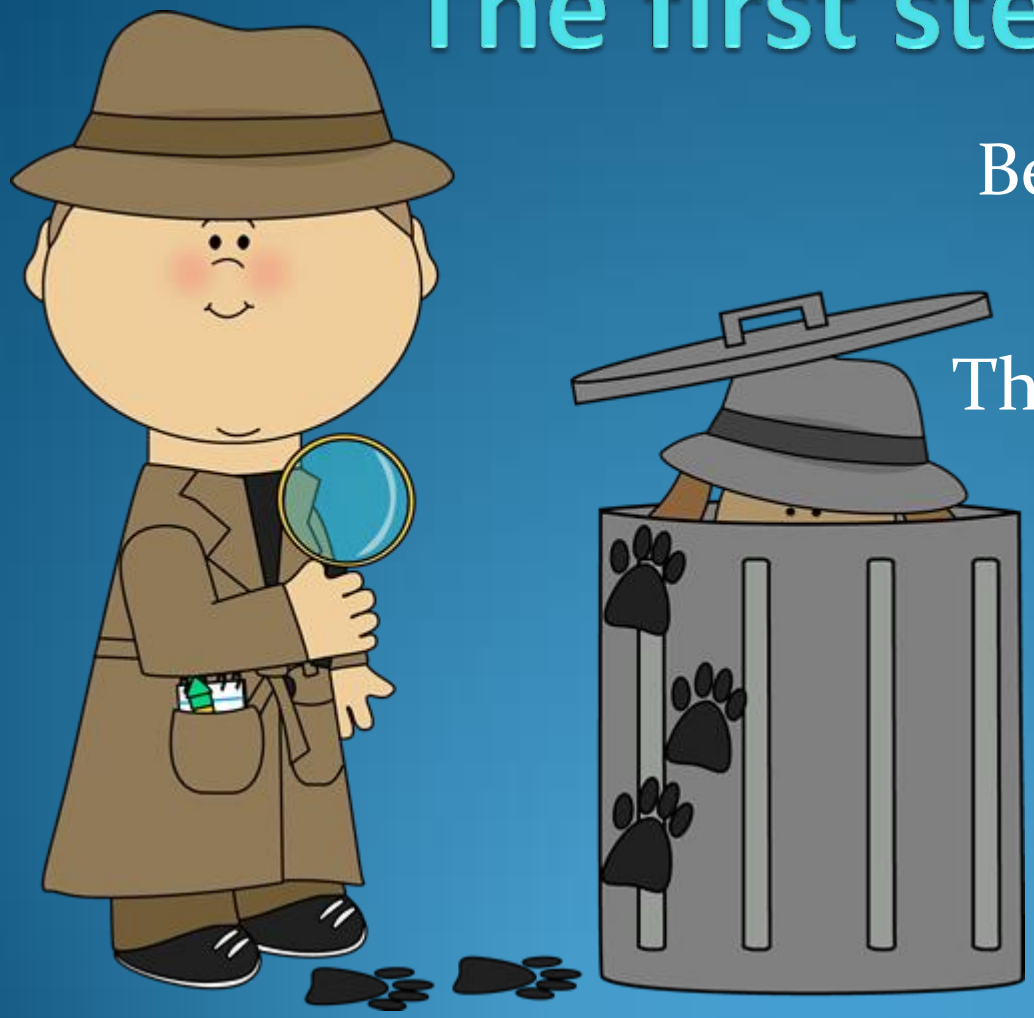
Welcome to ASE's Science Fair Parent Orientation

A Family Event

What is the purpose of a Science Fair Project?

To learn the scientific process!

The first step is easy….



Begin with a question.

This is the problem to be solved.

So…can it be ANY question?

Well…no. It has to be a question that requires testing and includes a variable.

A variable is simply something that will be changed in the experiment and then the experiment is repeated in order to answer the question.

EXAMPLE TIME!

1. *"How does salt affect the boiling temperature of liquids?"*

2. *"What is the effect of light on the rate of seed germination?"*

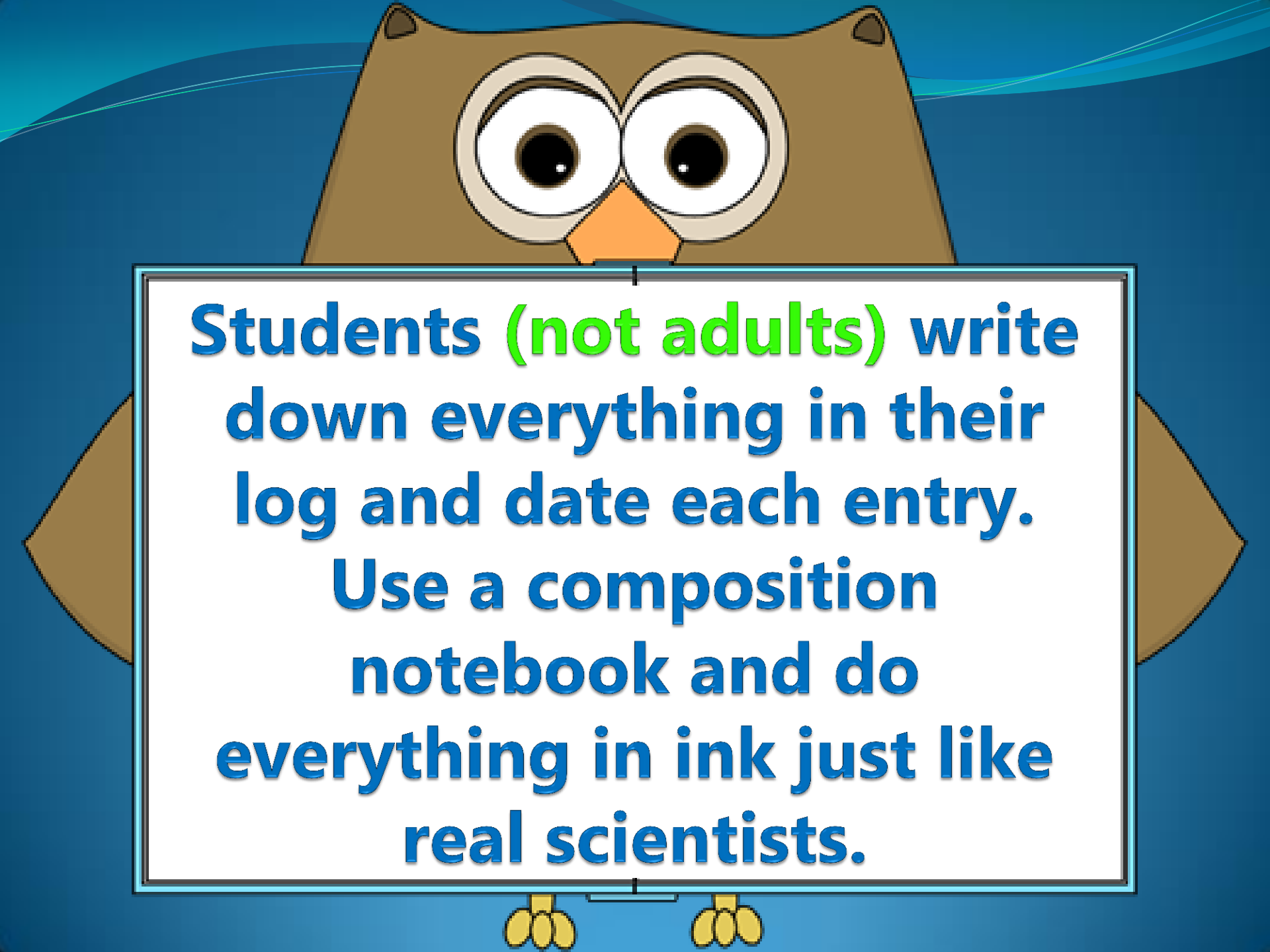
Don't forget: The testing MUST involve a variable.

That means that you test something and record the results.
Then you test it again changing ONE thing and record those results.
You compare the results to find your answer.

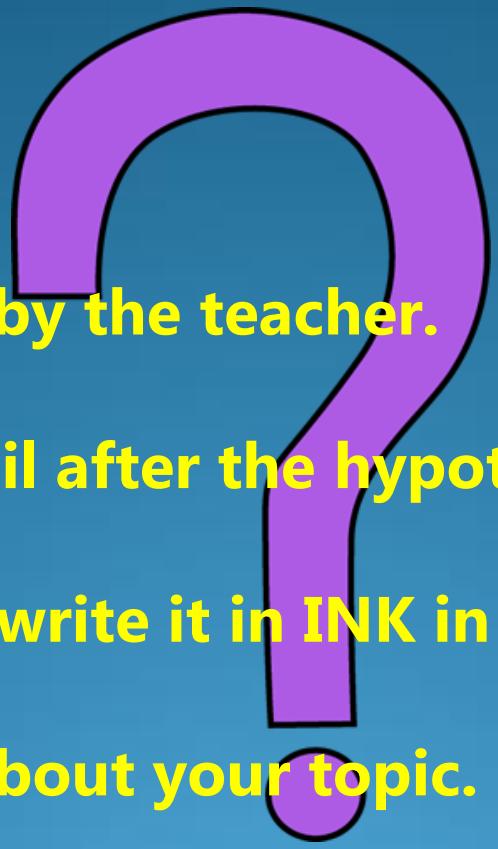
*In #1 above, the **variable** would be different liquids such as water, olive oil, etc.*

*In #2 above, the **variable** is the light (different watts of bulbs or fluorescent, etc.)*

Projects from previous years can be used as a continuation, with prior approval and both years data will need to be displayed. Many of the winners at the Regional, State, National and International Fairs are continuations over many years.


Students (not adults) write down everything in their log and date each entry. Use a composition notebook and do everything in ink just like real scientists.

So you found a question…now what?



Get it approved by the teacher.

NO TESTING until after the hypothesis is approved.

Once approved, write it in INK in your lab notebook.

Begin learning about your topic.

Make an educated guess as to what you think the outcome will be. This is your hypothesis! Write that in your book too!

If you mess up

- Just cross out your mistake
- Don't try to erase
- Don't tear out any pages
- Don't white it out

Why can't I fix it?

Scientists don't know what's going to happen. Sometimes things don't go as they planned. That's okay! They just write it down for future reference. You can do the same thing!

For your information . . .

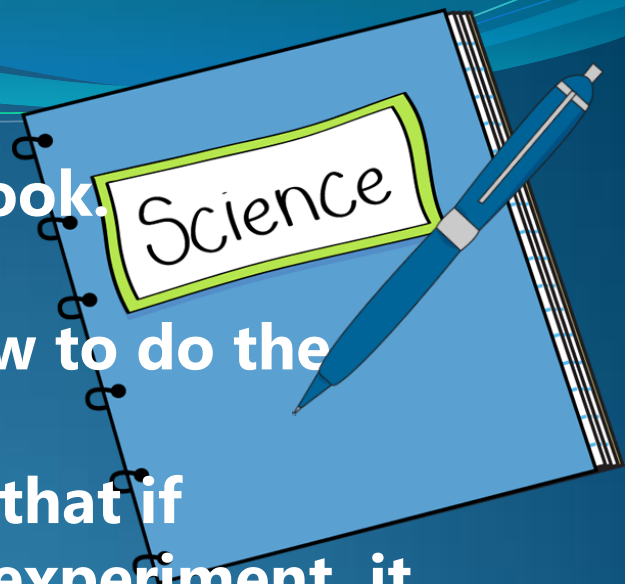
Humans

Animals

Risky projects, such as some chemicals

Require prior approval. The Deadline is November 23rd. This must be done before you begin the experiment .

So what's next?



1. Make a list of materials in your log book.

2. Write step-by-step procedures on how to do the experiment in your log book.
   These should be EXTREMELY clear so that if someone else were going to do your experiment, it would be exactly the same as yours. Feel free to number each step.

3. Do your experiment and write in your log about everything that happens along the way. Include a date and time for every entry. Take some pictures along the way.

4. Write a conclusion. Did it turn out like you thought it would?

Time to put it all together

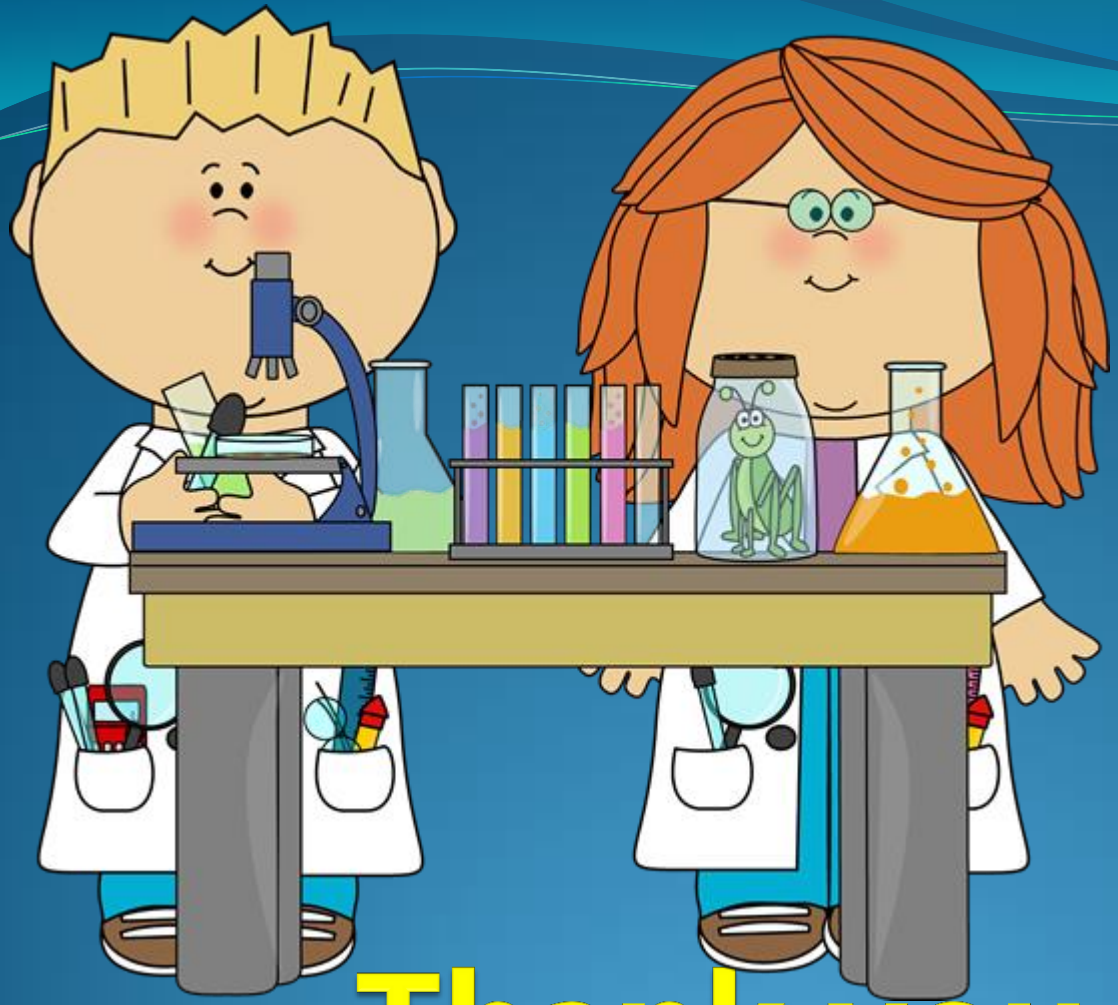
1. Purchase your board
2. Buy headings for each area or create your own. Make sure these look nice. Check online for ideas on decorating your board. Don't do too much though!
3. Prepare everything to go on the board. Lay it out before you glue.
4. Research Report and Abstract are the next step.

Science Fair Backboard Display Layout Option

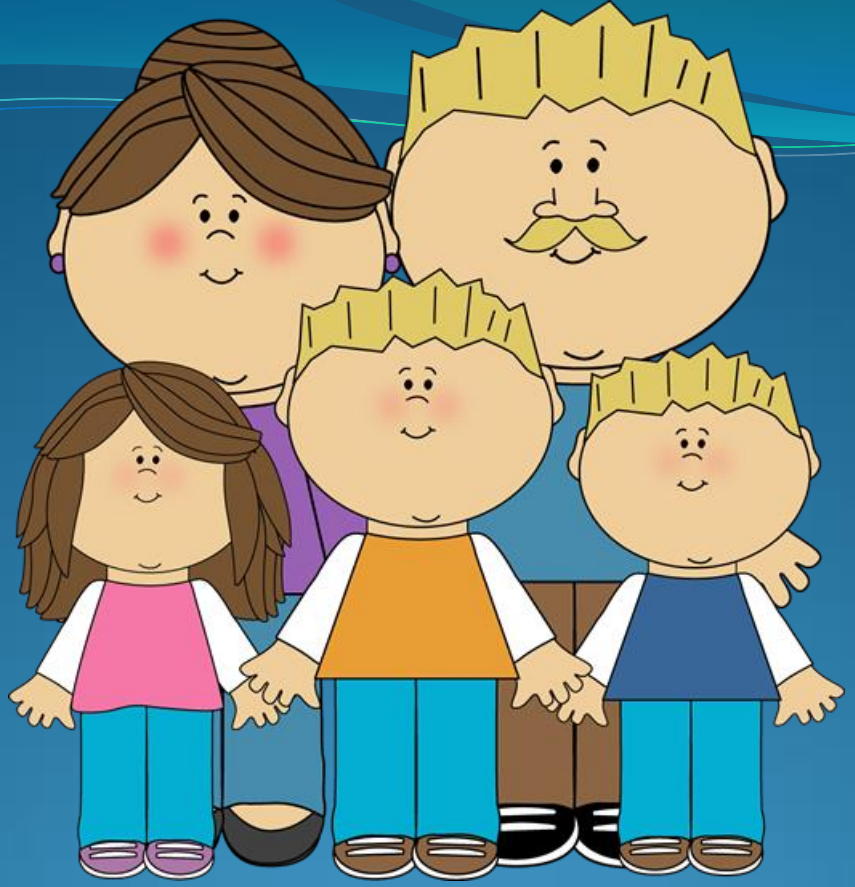
- Your question should be large enough to be read from three feet away and still fit on your board.
- If possible, type all information to be placed on your display board.
- Check and recheck for grammatical errors and spelling mistakes. Parents please help guide children to a quality finished board.
- Use color and mats to make your board attractive, but be careful not to overdo it.

ISEF

- https://www.youtube.com/watch?v=NbcbU0aZ678



Thank you for your support!



We hope you enjoyed this event!