How to Help Your Child Win a Science Fair



Wallace Elementary School Science Fair, 2013

Projects due: January 14, 2014, Tuesday

Science Night/Awards: January 17, 2014, Friday

Researched and Written by Deborah McAlister Holland

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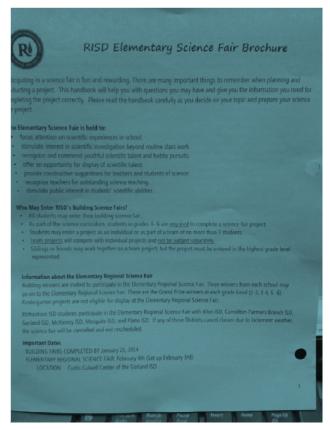
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Wallace Science Fair Schedule

- December 6, Friday Question Due
- December 13, Friday Hypothesis Due
- December 18 January 10, Work on Project
- January 10, Friday Results Conclusion Due
- January 14, Tuesday Final Project Due
- January 17, Friday Wallace Science Fair
- February 3-4, Mon-Tue **Regional Science Fair**

RISD Elementary Science Fair Brochure Sent Home With Your Child (Blue)

Safety Rules and Display Rules Step by Step Guide and Hints



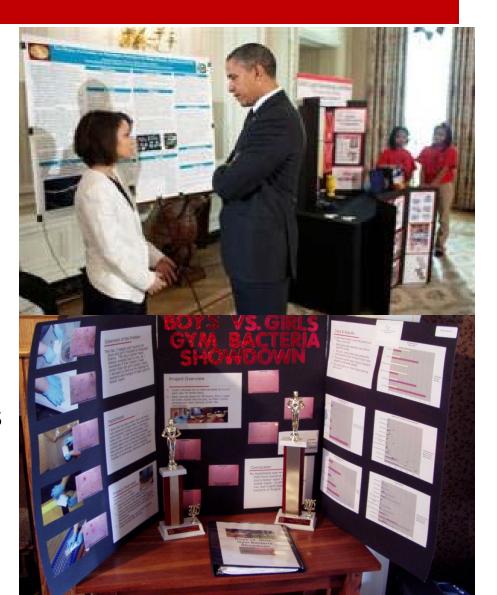
our Project - Step by Step Start as soon as possible to prevent a last minute project and to give yourself plenty of time to investigate your question Decide on your topic. Think about things you are interested in. What questions do you have that can be answered through a 3. Try to avoid the use of surveys and questionnaires. There are just too many things you can't control to be able to say your test in 4 Most projects will follow a basic scientific method. These steps usually include - State the Problem or Question- what are you trying to find out? Develop a Prediction or Hypothesis- what do you think will happen? What leads you to that belief? (Make a st Identify what you already know about this problem or question. What do you need to find out? Will give you the necessary background information? Think about your investigation. How will you set up an investigation to answer your question. List the Materials - what will you need to complete your investigation? Record the results. What did you discover from your investigation? Interpret the data and other observations. Draw conclusions based on your results. How do your results compare to you Typothesis? Can you relate your results to another situation? Remember, many times the results of an investigation do not 2. Create a display board following the guidelines mentioned in this brochure. Be nest and accurate How can parents help? Give encouragement, support, and guidance. Be positivel Make sure the project is primarily the work of the child. sulp your child understand that science is not just a subject, but a "way of looking at the world around part of the project. Photographs of these phases of experimentation can be used in the display. You

Your Job: Help & Guide

- Don't do the work for your child.
- Let your child make mistakes children learn much from their own mistakes!
- Read the rules with your child. Enforce safety standards and help your child follow the rules.
- Schedule the work and supervise the work.
- Ask questions of your child's teacher
- Email: <u>fredddallas@gmail.com</u>
- Use the Subject Line: SF Hints for Child's Name

Why Science Fair Matters

- Major part of grade.
- Teaches real-world problem-solving skills.
- Looks good on a magnet school application.
- In upper grades, there are prizes and scholarships.
 - National: \$1 million in prizes
 - Regional \$250K in scholarships



What Parents CAN & CAN'T Do

Parents Can & Should:

- ✓ Brainstorm.
- ✓ Explain concepts.
- ✓ Show them how to use required tools.
- ✓ Purchase supplies.
- ✓ Take photos of your child doing the work. (Make sure the child can't be identified in photos!)

Parents Can't & Shouldn't

- Assemble, build, or "help" with project or display.
- Do the research for them.
- Purchase a "kit".
- Write reports.
- Record data.
- Calculate results.
- Create drawings or graphs.

Read and Follow the Rules

- Don't bring prohibited items to school, or to a regional science fair.
- "No identifiable information" on display.
- Don't leave part of the project at home on the day it's due.
- Rework your display for Regionals.
- Focus on discovery, not winning.
- Every child that does a science fair project by themselves and completes a project board is both a winner and a scientist!

Start Early

- Regional Science Fair
 Prizes go to projects that take time.
 - Elementary School: 30-90 day projects
 - Junior High School: 90-180 day projects
 - High School: 6 month to 1 year projects
 - Multi-year projects at the national level



Answer a Real Question

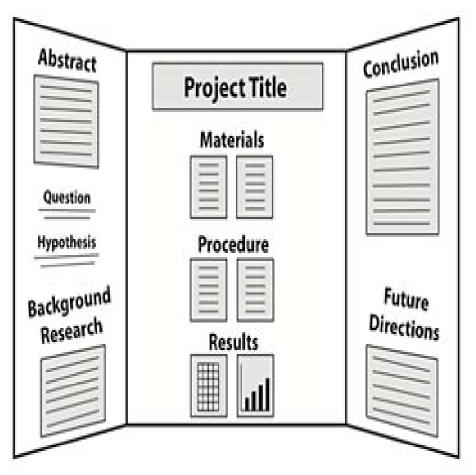


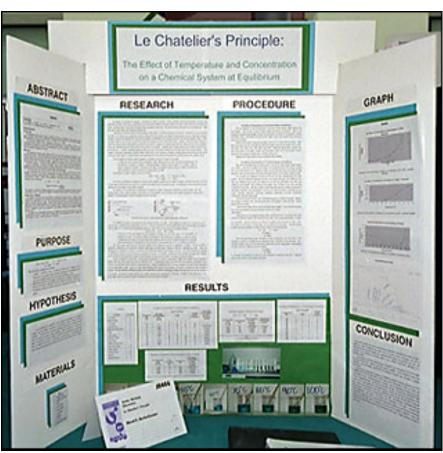
- Building a model is not a science fair project.
- Winning science fair projects answer a question that can't be answered by looking at Wikipedia.
 - Kids are great at asking this kind of questions.
 - If you know the answer, can Google the answer, or know that your child ever did it in class for a grade, don't do a project on it.

Every Science Fair Project Needs:

- A question (why the experiment was done)
- Hypothesis (what the student expected to happen)
- List of supplies
- Methodology or Procedure (a "how to" or "Step by Step" description of the experiment)
- Data (charts, graphs, photos, drawings, observations, information collected during the experiment) recorded by the child in a dated log book and shown on project display.
- Results as a Conclusion (what happened)
- Analysis (what the data means, and why it proves or disproves your hypothesis)

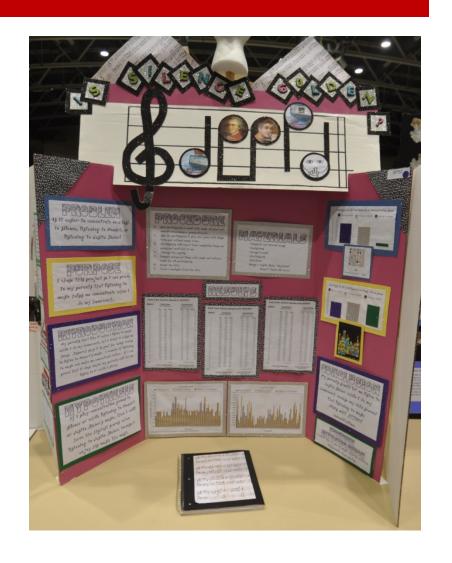
Where does the work show up?





Size Matters: Use Bigger Displays

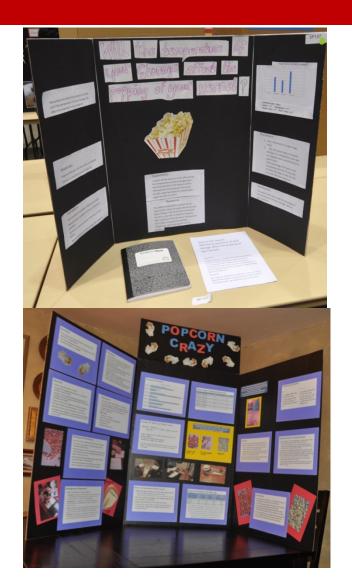
- Big displays are allowed.
 - Store-bought displays are half the allowable size.
- More room for:
 - Graphs & charts
 - Information
 - Photos
- Judges spend just a few minutes per entry to pick finalists.



Good Displays Matter



- North Dallas Regional Elementary Science Fair
- 222 projects per grade
- 1,553 projects
- <3 minutes to per project

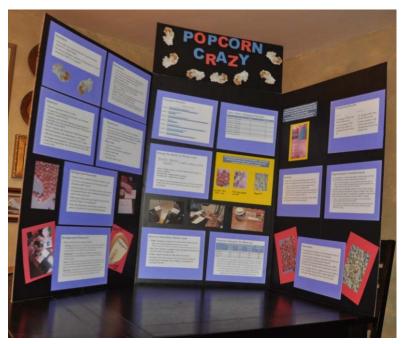


Creating a Great Display

Same Project – Two Displays – 125 photos – 14 graphs – 25 page Notebook







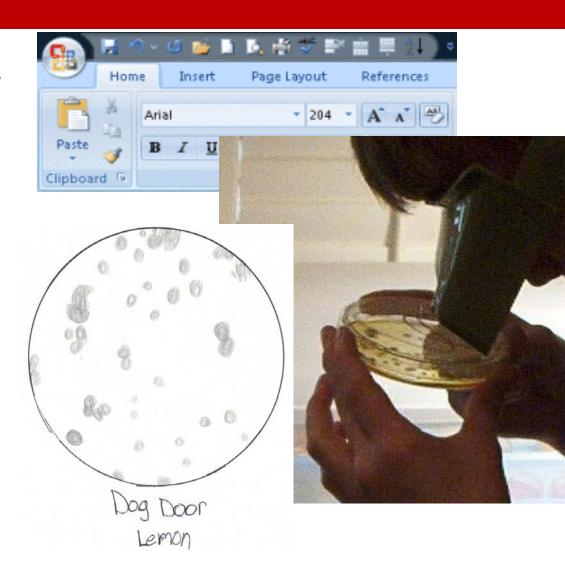
2012 Regional Science Fair Honorable Mention

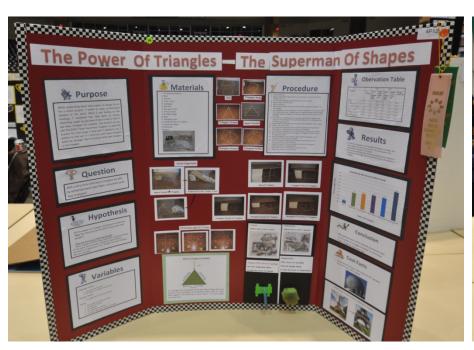
What Your Display Needs

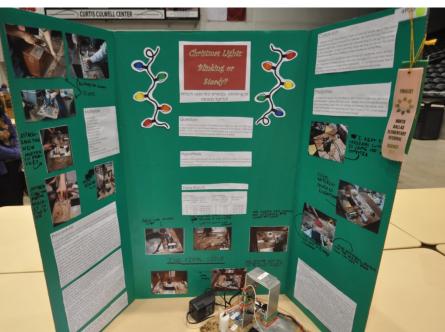
- Lots and lots of charts, graphs, and data tables.
- A notebook or journal.
- Clear photos of the process, equipment, and results.
 - Make sure that any required safety equipment (gloves, goggles, tongs, hot pads, etc.) are clearly visible in the photo.
 - Make sure that anything identifying (faces, scars, t-shirts with school or camp logos on them, hair, etc.) is not shown in the journal of on display.
- A story that makes sense.
- Readable, attractive presentation "boards."

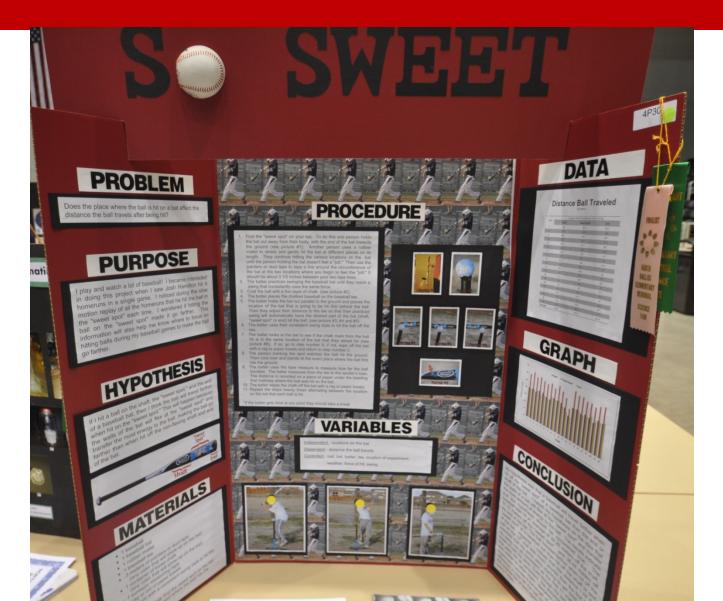
Money-Saving Tips

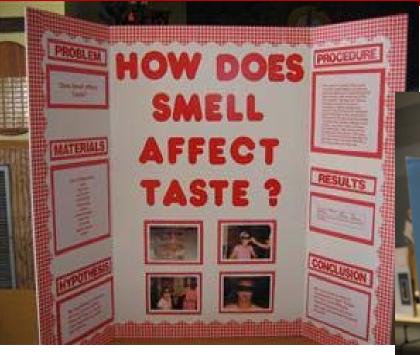
- Don't buy fancy letters.
- Print photos at home.
- Borrow equipment.
- Flinn Scientific Catalog.
- Let your child's creativity show.
 - Judges like hand-drawn illustrations.
 - Interesting photos are eye-catching.



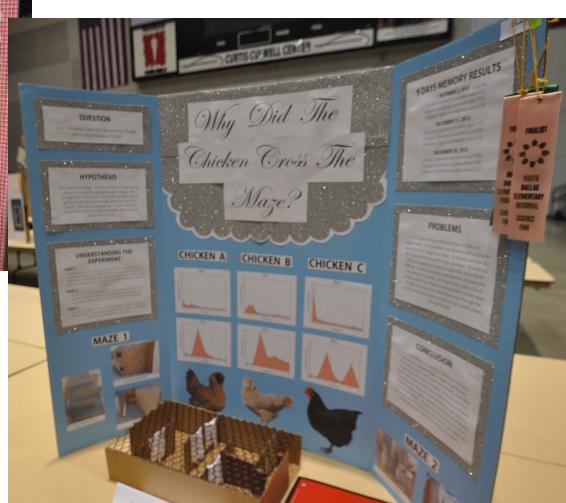


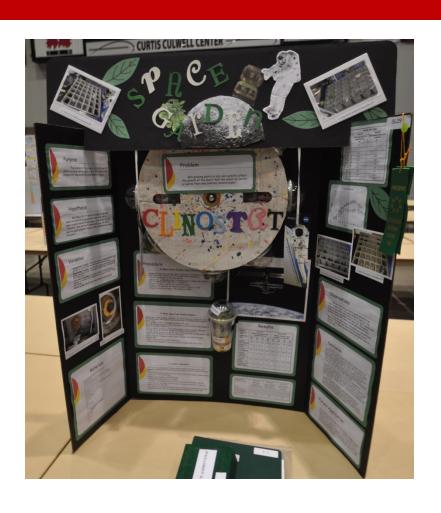


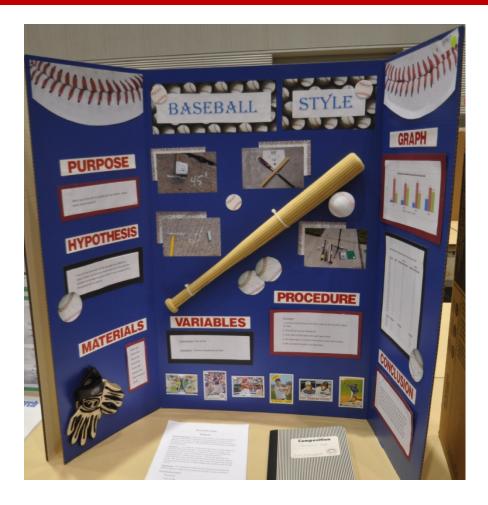




Expectations change with grade level. Use props where needed.







Contact: fredddallas@gmail.com or 214-340-4774

QUESTIONS?