

Science Fair: GETTING THE IDEA

Name _____ your email address: _____ Parent's email _____

A science fair project! What to do? Do I have to find a cure for cancer? A way to end pollution? An endless supply of inexpensive electricity? HELP! You're not expected to win a Nobel Prize with your very first project (that can wait a year or two!) What are you expected to do? First, you've got to select a topic. And, how, you ask, do you do that? This should help; just fill in the blanks.

LIST 4 THINGS YOU ARE INTERESTED IN

(piano, football, computers, people watching, reactions, plants, Skateboards, animals, photography) OR, 4 THINGS YOU HAVE WONDERED ABOUT that could be science fair project ideas

1. _____
2. _____
3. _____
4. _____

List 4 things you'll be doing this summer: traveling, taking classes, camp etc

1. _____
2. _____
3. _____
4. _____

Are your parent's scientists? List the kind of work they do. Do they have a lab to work in?

Do you have friends or relatives that have a lab available to work in?

Getting Project Ideas: Now, pick the 4 most interesting topics from above & ask yourself 5 questions about each one.

For example, let's say you really like football.

Your questions might include, "Can I write a computer program to predict the outcome of this year's NFL games?" "Would young players learn faster if the coach used a computer to diagram plays?" "Do Pac-Man whizzes make better passers?" "Do players with thicker necks suffer fewer injuries?" "Does artificial turf produce more touchdowns?" "What is the relationship between body fat & running speed?" Get the idea? OK, before you start on your questions, read through this list of banned projects below.

PROJECTS THAT WILL NOT BE ACCEPTED: PLEASE DO NOT ASK TO DO THESE!!

- | | |
|--|--|
| 1. Surveys that involve opinion sampling, product use, taste testing, etc. | 17. Strength/absorbency of paper towels |
| 2. Models (volcanoes, solar panels, electric circuits), Collections, Demos (how a battery works), & Kits | 18. Astrology or ESP |
| 3. Anything in violation of animal or other fair regulations (tobacco, explosives, rocket fuel, etc.) | 19. Basic maze running (or mouse maze running) |
| 4. Projects with small sample sizes or ones where it would be impossible to do a lot of tests & trials | 20. Effect of color on anything |
| 5. Illogical or "Who Cares?" tests (effect of Gatorade on plant growth) | 21. Optical illusions |
| 6. Projects in which the results are common knowledge | 22. Reaction times |
| 7. Projects which duplicate standard class/text experiments | 23. Most male/female comparisons |
| 8. Anything with purely subjective measurements or preferences | 24. Basic planarian re-growth |
| 9. Product testing (which is best?) that lack science | 25. Laundry detergents on stains |
| 10. Projects in which the results will take years & years of research (do vaccines cause autism?) | 26. Basic flight tests, e.g. planes, rockets |
| 11. Effect of colored light, music, talking on plants | 27. Battery life of the plug in & run down type |
| 12. Effect of caffeine, smells, music, or anything on test scores or school work | 28. Popcorn volume tests |
| 13. Mold or crystal growth | 29. Flower preservation techniques |
| 14. Effect of soda, coffee, tea on teeth | 30. Child-resistant caps tested on kids (arthritis, maybe) |
| 15. Effect of running, music, video games, anything, on blood pressure | 31. Sleep learning |
| 16. Do we eat balanced diets? | 32. Taste or paw-preferences of cats, dogs, etc |
| | 33. Ball bounce tests with poor measurement technique |
| | 34. Burning plants or leaves |

Write 4 favorite topics below. For each, develop 3 testable ideas/questions about how this could turn this into a science fair project. Be realistic about the amount of time needed for testing, resources, & HOW you would to test this idea.

Topic #1: _____ My 3 questions about this topic that could be a SF project are

1. _____
2. _____
3. _____

Topic #2: _____ My 3 questions about this topic that could be a SF project are

1. _____
2. _____
3. _____

Topic #3: _____ My 3 questions about this topic that could be a SF project are

1. _____
2. _____
3. _____

Topic #4: _____ My 3 questions about this topic that could be a SF project are

1. _____
2. _____
3. _____

List 5 additional individual project ideas that you may have here:

1. _____
2. _____
3. _____
4. _____
5. _____

Last Step: Circle your favorite questions.

DO NOT simply go to these sites and “borrow” an idea. THAT is totally boring and way overdone. Think of something NEW that you could do with some of these ideas that would make it unique for YOU to test. Remember, the BEST ideas come from something that YOU are really interested in!

Places to look for ideas:

- <http://www.school.discovery.com/sciencefaircentral>
- <http://www.gsdsef.org>
- <http://www.usc.edu/CSSF/>
- <http://www.gsdsef.org/GeneralInfo/links.shtml>
- <http://www.all-science-fair-projects.com/>
- <http://pbskids.org/dragonflytv/scifair/index.html>
- <http://www.cool-science-projects.com/index.html>
- <http://www.cdli.ca/sciencefairs/intermed.html>
- <http://www.scifair.org/projects/>
- Science Buddies SF Guide
- http://www.sciencebuddies.org/mentoring/project_guide_index.shtml
- Lakewood Public Library Guide
- <http://www.lkwdpl.org/study/sfair/>
- Another science teacher's take on SF
- http://www.ri.net/schools/East_Greenwich/Cole/sciencefair.html

Search Engines for research paper:

- <http://www.dogpile.com>
- <http://www.yahoo.com>
- <http://www.ajkids.com>
- <http://www.yahooligans.com>
- <http://www.educationworld.com>
- <http://www.infoplease.com>
- <http://www.vlib.org/Science.html>
- <http://www.encyclopedia.com/>
- <http://www.refdesk.com/fastfact.html>
- <http://www.ask.com/index.asp?>
- <http://www.google.com>