Websites

AACPS Science Fair
http://www.aacps.org/science
Information and forms supporting the Anne Arundel County Regional Science and Engineering Fair

Intel International Science and Engineering Fair
http://student.societyforscience.org/forms
Contains a Rules Wizard for students beginning research projects. The wizard helps identify what forms are required.

• Completing a Science Fair Project
• Searchable Finalist Abstracts
• Student Handbook
• Master the Abstract Writing Process
• Creating an Effective Project Display
• Rules and Guidelines

Science Buddies
www.sciencebuddies.org (choose the Project Ideas tab)
Science Buddies offers detailed guidance and examples for serious students who want to do the best possible project.

• “How-to” information
• Ask an expert online mentoring
• Teacher resources

Science Buddies Advanced Project Guide

Preparing for Advanced High School Science Competitions

• Overview of the Top Science Competitions
• Nine Reasons to Do a High School Science Project
• How to Be Successful at a Top Science Competition
• Roadmap: How to Get Started On an Advanced Science Project
• How to Find a Mentor
• Mentoring & Coaching Advanced High School Student Research
• Roundtable on Finding an Idea for an Advanced Project
• Sample Projects from Advanced Competitions
• How to Read a Scientific Paper
• Resources for Finding and Accessing Scientific Papers
• Scientific Review Committee (SRC)
• Experimental Design for Advanced Science Projects
• Increasing the Ability of an Experiment to Measure an Effect
• Data Analysis for Advanced Science Projects
• Data Presentation Tips for Advanced Science Competitions
• Big Display Boards for Top Fairs
• Judging Tips for Top Science Competitions
• From a Judge’s Perspective: Tips for a Successful Scientific Interview
• When Competition Doesn’t Turn Out the Way You Want
• Documenting an Experiment with an Electronic Lab Notebook

What Makes A Good Science Fair Project
www.usc.edu/CSSF/Resources/Good_Project.html
A website from USC that gives a lot of good tips and ideas to think about regarding what makes a good science fair project. Advice for students as well as teachers and parents is included.

Parent Resources to Science Fair Projects
http://school.discoveryeducation.com/sciencefaircentral/Parent-Resources.html

• What is the parent’s role?
• How do I help my student come up with a project idea?
• How much time will we need?
• How do I help with the project?
• What are the main sticking points for students?
• What should the final project look like?
• What else can I do to help?
• Where do I get supplies?

Science Fair Organizer for Science Fair Coordinator
http://school.discoveryeducation.com/sciencefaircentral/Coordinating-a-Science-Fair.html
Find a wealth of resources for a successful science fair, from getting students on track to judging the final experiments.

• Why do a Science Fair?
• Types of Projects: Investigations and Inventions
• Science Fair Coordinator’s Checklist — What should I do?
• Parent letter
• Science Fair judging criteria
• Project display checklist
• Science Fair Shopping List

Science Project Ideas
www.scienceproject.com
World’s largest web site for Science Project ideas, information and support.

• Middle School project ideas (Intermediate projects)
• High School project ideas (Senior projects)

Science Fair Adventure
http://www.sciencefairadventure.com/
Science Fair projects ideas by topic.

Science Fair Projects
http://www.terimore.com/
Hundreds of science fair project ideas:

• Quick and easy science fair projects
• Science fair projects with interesting results
• Science fair project winners
• Everyone’s favorite science fair projects!

Math Ideas for Science Fair Projects
http://mathforum.org/teachers/mathproject.html
http://mathforum.org/library/drmath/sets/high_projects.html

• Includes tips on finding interesting ideas
• Topics arranged by math subjects

Student Blogs from Advanced High School Competitions
Science Fair Resource Guide
www.ipl.org/div/projectguide
Resources for science fair projects. Includes tips, explanation of the scientific method, and help choosing a topic.

Successful Science Fair Projects
http://faculty.washington.edu/chudler/fair.html
Includes an overview of how to do a science fair project and additional science fair websites.

Science Fairs
Information about research methods and statistics that is particularly useful for high school students.

Students discuss various aspects of a science fair project.
http://www.archimedesinitiative.org/themes.html
Student interviews on an array of insightful projects providing excellent advice from conquering fears to working through unforeseen results.

Agricultural Ideas for Science Projects
www.ars.usda.gov/is/kids/fair/ideasframe.htm
This website offers suggestions for a wide variety of science fair projects with an agricultural theme.
  · Botany
  · Chemistry
  · Environmental Science
  · Medicine and Health
  · Microbiology
  · Zoology

Virtual Library—Science Fairs
http://physics.usc.edu/%7Egould/ScienceFairs/
A comprehensive list of every science fair accessible through the Web.

Super Science Fair Projects
www.super-science-fair-projects.com/
Complete Guide to Science Fair Projects, Topics and Experiments
  · Steps for Doing a Science Fair Project
  · Science Fair Idea: Winning Strategies
  · Science Fair: How Judges Think
  · School Science Fair Projects: How to keep a Timeline
  · Science Project Ideas: Science Category Outline
  · Science Fair Project Ideas: Science Topic Outline
  · High School Science Fair Projects: How to do Project Research
  · Kids Science Fair Projects: How to Write a Project Report
  · Middle School Science Fair Projects: How to Do a Presentation
  · Cool Science Fair Projects: Day of the Science Fair
  · Best Science Fair Projects

Science Fair Resource Center
http://homeworkspot.com/sciencefair/
Project ideas, information, books and kits
  · General Science Fair Project Ideas
  · Ideas by Subject
  · Help
  · Middle School Science Resources
  · High School Science Resources

Resources from other Competitions

Junior Science & Humanities Symposia (JSHS) Program
http://www.jshs.org/
JSHS is sponsored by the research arm of the Department of Defense and administered in cooperation with nationwide colleges and universities. JSHS aims to prepare and support students to contribute as future scientists and engineers -- conducting STEM research on behalf of or directly for the Department of Defense, the Federal research laboratories, or for the greater good in advancing the nation’s scientific and technological progress. Contains a variety of excellent resources including preparation and presentation tips. A list of awards and scholarships is also included.

The Dupont Challenge Science Essay Competition
http://thechallenge.dupont.com/

Google Science Fair
http://www.google.com/events/sciencefair/
  · Science Project Resources
  · Partner Resources- especially Scientific American

Maryland BioGENEius Challenge
The premier competition for high school students that recognizes outstanding research in biotechnology.

Toshiba ExploraVision
http://www.exploravision.org/
ExploraVision is a science competition that goes beyond the typical student science competition and into what it takes to bring ideas to reality. A teacher will sponsor and lead his/her students as they work in groups of 2 - 4 to simulate real research and development. A teacher will guide his or her students as they pick a current technology, research it, envision what it might look like in 20 years, and describe the development steps, pros & cons, and obstacles.
Books

Scientific American's
The Amateur Scientist
Date: 2002
For over 70 years, Scientific American’s “The Amateur Scientist” have been a reliable source of winning science fair projects. Now you can get all of these columns, plus pages of supplementary material on a CD-Rom.
Bright Science Lic; CD-Rom edition
ISBN: 0970347626

Strategies for Winning Science Fair Projects
Date: 2002 Grades 6–12
This resource is packed with strategies and pointers for putting together a winning science fair project. Here you’ll get the nitty-gritty on a wide variety of topics, from the fundamentals of the science fair process to the last-minute details of polishing your presentation.
John Wiley & Sons Inc.
ISBN: 0471419575

AACPS Library Media Services

To access the online databases listed below from home or a remote location go to http://opac.aacps.org
Click Online Databases.

EBSCO
A collection of magazine and newspaper articles, books, and documents. Has primary sources, photos and videos.

ERIC documents on-line
Grolier Amazing Animals
Short articles about more than 1,000 animals of the world. Has pictures and games.

Image Quest
Contains approximately three million rights-cleared images from all over the world.

Infobase Learning
The World Almanac for Kids has information about many subjects: animals, people, countries, career ideas, geography, astronomy, American and world history, and many others. Includes pictures, games and puzzles.

PebbleGo
Includes two science related database; PebbleGo Animals and PebbleGo Earth and Space. PebbleGo Animals is designed specifically for emergent readers and features more than 200 animal articles correlated to life science standards, animal audio and video, carefully leveled text, educational games, and innovative read-aloud capabilities. PebbleGo Earth and Space includes concepts like weather, seasons, Earth science, and space — all with the built in reading and research tools made popular with PebbleGo Animals. Leveled text, educational games, and videos support science concepts for your youngest researchers.

ProQuest Research Resources
Interactive pictures of historical newspapers from the 1800s to today.

Sailor Research Databases
Links to all of the Maryland public library’s online databases. A wide variety of information from magazines, reference books, journals, documents, videos, and pictures.

SIRS Researcher & SKS WebSelect
Encyclopedia and magazine articles, pictures, videos, biographies, general topics, current events, people, and the arts. Good primary sources. “Pro v. Con” explores both sides of current issues. Translates articles into Spanish.

SIRS Discoverer & Discoverer WebFind
Good for beginning learners and researchers. Includes activities, biographies, fiction, country facts, maps, charts, pictures, science fair ideas, and lots of information about the arts, math, science, language arts, social studies, health.

Thomson Gale Resource Center
Encyclopedia and magazine articles, videos, pictures, and primary sources for information on U.S. and world history, science, and literature. Translates articles into Spanish.

World Book Online
English and Spanish encyclopedia, atlas, dictionary. Articles on a lot of different topics, including current and historical events, with primary sources including videos and photos.