

SCIENCE FAIR CENTRAL

SCIENCE FAIR COORDINATOR'S CHECKLIST

Here's a handy checklist that breaks down key project management stages into manageable tasks:

Getting Started

- **Get up to speed on the A to Z of science fairs** by surfing around this website. You'll learn everything you could possibly need to know and sound like a pro.
- **Meet with a small planning group to decide on goals** and guidelines for your own science fair. Make sure you're able to enlist enough help to make the event feasible. Use the examples from this site for science fair rules, project timeline and judging criteria to make your decisions. If you are a group problem solver, let the group decide. Or you may want to make up your own version of the time line, rules, and criteria, and present it to them for comment and editing.
- **Set safety guidelines that everyone agrees to**, including chemicals, heat, and electricity.
- **Decide if you will allow the use of animals in investigations.** This may be a no-brainer, but it can become a huge issue, depending on your community. Check with an administrator to see if your school system already has a policy about animals in science fairs.
- **Consider allergies and the possibility of disease transmission**, especially from vertebrate animals. Some fairs allow non-poisonous, invertebrates to be brought in, but they must be cared for and not left behind. In any case, it is not a good idea to allow animals to be brought to the science fair itself.
- **Communicate the guidelines to the principal and other administrators.** Make sure they're on board and can support you.
- **Determine if you will have the judging happen** during the school day, in the evening, or on a weekend day. Many schools conduct the judging during the day, then invite parents and the community to visit in the evening. Doing it all on one day simplifies scheduling the science fair area.
- **Select possible dates for the fair** and work with the principal to finalize a date. There is a lot to consider, including giving students enough, but not too much, time to do their projects.
- **Find a location for the fair** (like your school gymnasium) and reserve it if necessary.
- **Check for the availability of electricity**, if you think you'll need it.



- **Think about where the judges will meet and talk.** They may need to make decisions away from the fair itself, so have a separate room where you can greet them, give them last minute directions, and where they can relax and discuss things.
- **Decide where you can store student presentation boards** ahead of time.
- **Communicate the date and location** to the school office for the school calendar and website, and to all teachers and staff.
- **List the roles and number of people you'll need**, and put out a call for help from parents, faculty, and staff.
- **Involve the building services staff.**
- **Form committees to help with various aspects of the fair.** Form a small core review team to oversee results at the end.
- **Consider setting up a location on your school's web site** to post up-to-date information on the science fair.
- **Familiarize yourself with judging and official guidelines.** Will this be an informal or formal science fair?
- **Provide committee members with copies of any relevant judging criteria and worksheets**, as well as official rulebooks to use as reference.
- **Draft a project proposal worksheet for students** to help them formulate their ideas. Students should fill these out and pass back to the teacher for approval. Examples of these worksheets are available on the Science Fair Central site.
- **Brainstorm ways to celebrate science** throughout the month of the fair.

Monitoring Projects

- **Design and distribute registration forms** for teacher-approved science projects. This site has some examples available.
- **Set up a database to track data** (student name, project title, etc) on projects.
- **Have each student complete the planning sheet** by a specified date to give them at least four weeks to conduct the investigation and ready the project presentation.
- **Check in with or have teachers check in with students** about two weeks before the science fair. They should have completed their data collection and be started on the presentation. An e-mail reminder to parents at this point is a good idea.

Call for Judges and Judging Process

- **Send out a call to find judges in your community.** Tap a variety of people: retired science and math teachers, local engineers, anyone with a background in science or technology. Consider what local



business you have that employ engineers or scientists. Don't forget that practitioners, such as doctors and dentists, have a background in life science.

- **Reach out to other schools about judging each other's science fairs.** It's a great way to build community and make connections with nearby colleagues with similar interests.
- **Set up your judging fair schedule in 2 hour shifts.** That way, if a judge can only give you a couple of hours of his or her time, they can still participate.
- **How many judges will you need?** Ideally, you will have 3 judges per project to balance the scoring. If you allow 10 minutes per project including the oral presentation (5 minutes or less) then, for example, 60 projects will require 10 hours of judging. If you have 5 teams of judges, that gets those projects done in two hours of steady review and scoring. Don't forget to give the judges some time to breathe!
- **Send judges packets of information to study in advance.** Include fair schedule, criteria for projects, and judging rubrics or worksheets.
- **Pick up the phone and call judges before the fair,** just to confirm date and time and to establish a personal connection. Let them know how much they're appreciated!
- **Scoring should be as objective as possible.** Have the judges score the projects independently and turn in the scoring sheets to you to be averaged. There's nothing wrong with some discussion among them out of earshot of the students, but they will understand the need to be objective and independent.

Pre-Fair Details

- **Work out a schedule for class visits** to the science fair presentations during the fair. You'll want a steady stream of visitors rather than traffic jams.
- **Remember to set up a means to get your presenters to the fair** from class when it's time for their presentation to the judges. You can organize the in-person presentations by grade level, class, or project type.
- **Identify any student helpers** who will greet and guide your judges and distinguished visitors.
- **Invite your school system's superintendent and board of education.** Even if they can't make it, they'll appreciate being asked to be involved in science and will remember your school's program.
- **Call your local newspaper** to inform them about the event. Follow up with an email or letter with all details.
- **Have name tags, clipboards, pencils and bottled water available for the judges.** If they will be there all day, see if the parent organization can provide coffee and lunch.



Fair Set-Up

- **Talk to school custodians** far in advance about set-up and break-down of the fair.
 - **Are there enough tables available** to accommodate the number of display boards? Can they be set up the day before? Or the evening before?
 - **Will someone be available before and after school hours** with keys to all necessary rooms and buildings?
- **Enlist parent volunteers** to help with setting up tables, photocopying paperwork, and other useful tasks.
- **Enlist someone to take photographs.** You'll want them to show future groups and just for fun!
- **Prepare certificates of participation for all students.** If there are prize tags to be awarded, have these prepared and ready.
- **Have students complete the top portions of the judging sheets** with title of the project and name(s). Usually you will want 4 sheets per project. If they don't do it, you or the judges will have to and that eats up valuable time!

Day of the Fair

- **Make sure you have all the scoring sheets** as students enter with their projects. Have extra blank sheets on hand.
- **Inspect each project** to make sure it labeled, numbered, and has been reviewed by a teacher.
- **After judging is complete, it is your job to tabulate the scores.** Be sure to have a responsible helper who can double-check your math.
- **Budget and time permitting, it's a nice gesture** to have something to give to every student who participated—either a certificate of participation, or a button or pin.

After the Fair

- **Announce the winners in a ceremonious way.** Work with your principal to decide an appropriate time and place. Make it official yet fun. If you invite parents and community in the evening, the announcements should already have been made at the end of the day. Otherwise, the ceremony can take up all the time they would have used to go around and see all the presentations.
- **Be sure to collectively recognize the hard work and talent of all the students who participated**—not just the winners.
- **Send thank you notes to everyone** who helped at the fair, from judges to parent volunteers.
- **If there is a system-wide or state science fair, meet with the winners** to discuss the next level of competition. Encourage them to keep up the momentum!



- **Complete the registration forms** for the next level of competition and return them before the deadline.
- **Collect photos of students, teachers and parent helpers at the fair**, and of interesting science projects—not just the winners! Display proudly on a bulletin board for all to see.
- **Ask for feedback from science teachers and other staff.** Place a stack of feedback forms in the teacher lounge. It's never too early to recruit helpers for next year's fair!

Developing Science Fair Guidelines

Try to keep these simple. No matter what you decide on or how well guidelines are written, expect there to be things that you will have to clarify. This is normal. If the fair is judged, these will be the rules of the fair.

Make it clear from the start: you are the final interpreter of the rules. Be sure your principal backs you up on any tough decisions. In many cases, boards of education or superintendents have set science fair rules. Check with your science curriculum supervisor to see what your school system has prescribed.

Things to consider in developing your science fair guidelines:

Topics that are allowed and not allowed

Animals (decide which animals might be allowed for investigations)

- Usually insects and lower species are not of too much concern, vertebrates are usually off limits
- Behavioral experiments can be allowed as long as no harm (physical or psychological) comes to the animal
- There is a difference between experimenting with animals and observing their behaviors in their natural environment. The latter is usually considered to be o.k. for science fairs.

Chemicals

- Non-toxic should be a general rule, but level of toxicity can be decided by the committee.
- Non-explosive; an exception may be model rockets under adult supervision. Obviously, no explosives of any kind can be at the fair presentation.
- Slightly corrosive chemicals (cleaners, mild acids and bases) can be used, but must be completely contained if brought in to show at the presentation.

Energy

- Heat is necessary in many investigations or engineering solutions (inventions). Once the temperature is going to get above 50 degrees C (or 120 degrees F) adult supervision should be brought in. Most children don't realize that even low temperature devices can build up heat energy over time and cause harm.



- Open flames should be avoided. They can only be used under adult supervision with proper safety gear, and cannot be used in the presentation, *ever*.
- Electricity can be battery generated for the most part, but again, today's batteries can generate a lot of charge that can be released instantly (consider the flash in a camera). Experimenting or inventing with the household currents (100v or higher) is usually not allowed unless under the supervision of a qualified electrician.

Propriety

- You know your community best, so knowing what will be o.k. is a judgment call. Backward engineering a toilet to find out how it works and improve its efficiency is usually considered a good engineering topic, but there are limits.
- Make it clear that the final approval on a topic is yours.

