Information for Students

Student Section

Important! We now have on-line registration (Will be active in January). Please follow the instructions below.

*All written reports and log books must disclose and cite* where appropriate the specific source(s) of the idea for the project. Citations must be fully documented with references such as author(s), date, publication and URL if website.

WHAT DO I NEED TO DO TO ENTER DISTRICT SCIENCE DAY?

1. Participate in a science fair at your school, school district, or at the county level and rank among the better projects in the fair (Usually this means receiving a superior ranking.). If you would like to participate but your school, district, or county does not offer a science fair opportunity you will need the recommendation of a science teacher familiar with your research. Please contact the Director of NWDSD, Mark J. Camp for special permission to enter.

2. Read the information included on the Ohio Academy of Science and NWDSD webpages including: the Ohio Academy of Science Standards, which contains instructions, judging criteria, research reports, and tips on oral presentations. If you do not have internet access please contact Director Mark J. Camp (419-530-2398) and information will be mailed to you. Please request this early in the school year, so adequate time remains.

3. Identify a topic or problem to study and begin the research project as soon as possible, preferably in the Fall. Place the research project in one of the following categories: behavioral science, biochemistry, botany, chemistry, computer science, earth & space science, engineering science, environmental science, mathematics, medicine & health, microbiology, physics, or zoology. Be sure to complete Checklist for Adult Sponsor/Safety Assessment Form (1) before experimentation begins. Signatures are required before you start your project. Then complete
Student Checklist/Research Plan (1A) individual or team version) and Approval Form (1B). Note that Form 1B must pass review from the District Scientific Review Committee (SRC). Later when registering online you will complete an Individual or Team Registration Form, Consent and Release Agreement, abstract, and other necessary forms as indicated. If your project is a continuation of research from last year, you will be required to complete a Continuation Form (7).

When you find out you have qualified for Northwest Ohio District 2 Science Day, click here (not active until January) to begin the online registration process. You will be asked to create an account. After an account is created, follow the instructions to complete your registration. Forms will need to be printed out, signed, and returned to the District 2 office with the appropriate registration fee by February 23, 2015. Make 2-3 copies of all forms and keep originals (except consent-release agreement) in a file at home. Be certain original consent-release agreement is sent in with your registration to NWDSD; keep a copy.

4. If a project involves research at a registered research institution or industrial setting and/or involves research with nonhuman vertebrate animals, human subjects, pathogenic agents, controlled substances, recombinant DNA, human and nonhuman animal tissue, and/or hazardous substances and devices additional forms must be completed and submitted with each registration. These forms may include Registered Research Institutional/Industrial Setting Form (1C), Qualified Scientist Form (2), Risk Assessment Form (3), Human Subjects and Informed Consent Form (4), Nonhuman Vertebrate Animal Form (5), Potentially Hazardous Biological Agents Form (6A), and Human and Vertebrate Animal Tissue Form (6B). These forms are detailed, require certain signatures, have time restraints, and must be carefully adhered to. If you have any questions or problems please contact the Director Mark J. Camp at 419-530-2398 mark.camp@utoledo.edu. Failure to complete forms will lead to disqualification. Your science teachers may approve research plans in lieu of review by a Local Scientific Review Committee, if the proposed research does not involve recognized research risks or issues. Note working with humans, even just having them answer questions, involves
additional forms. Also, using many chemicals, even common household products like bleach require approval and extra forms. Do not use pets for animal research.

5. Write a detailed report. The report usually includes a title page; table of contents; abstract; introduction (problem and hypothesis to be investigated); methods and materials of investigation; analysis of collected data; conclusions or implications; graphs, tables, and diagrams; and references. **The detailed report is not to be sent in; just a copy of the one page abstract and the abbreviated report of the Research Plan Attachment (second page of Form 1A).**

Complete an abstract through the online registration site containing no more than 250 words. A heading must contain the project title and name(s) of the author(s). The heading does not contribute to the word count. The purpose of the abstract is to provide a summary of your project that will inform interested individuals of the contents. The wording must be written in a manner that any scientifically-minded individual, who may not be familiar with your topic, can understand the project's important points. The following should each be summarized in a few sentences:

a) Background information necessary to understand the abstract and its importance.

b) The problem that was investigated and your hypothesis.

c) Outline of the materials and methods used in your experimentation.

d) Summary of the results obtained from your experimentation.

e) The conclusions drawn from your results.

f) The importance or potential applications your research offers.

In your abstract do not be concerned with including all the details. The key point to remember when writing an abstract is to keep the wording brief and concise. Use complete sentences. Abstracts should only provide necessary information needed to understand the project's basic points and importance.
Please note the abstract is a brief synopsis of the pertinent techniques used and a summary of the findings, it is not the same as the report which goes into greater detail of the research process and results.

6. Set up a physical display. This is a tabletop poster display (36" wide x 30" deep) exhibiting tables, diagrams, graphs, photos, etc. It may extend no higher than 7 feet, measured from the floor. Free-standing floor exhibits are not permitted. No equipment is to be displayed at your exhibit site; only the poster setup and supporting paper documents. No equipment or specimens are to be attached to your display boards. Battery-powered computers may be used only for simulation, modeling, or animation integral and essential to the project results or data display and not for general PowerPoint presentations. Information such as postal, web, and e-mail addresses, telephone and fax numbers are allowed for the exhibitor only. The only photographs or visual depictions of identifiable or recognizable people allowed are photographs of the exhibitor, photographs taken by the exhibitor (with permission of individuals received), or photographs for which credit is displayed (such as from magazines, newspapers, journals, etc.) The score of your project may be impacted by the violation(s) if either the physical dimensions or physical items rules are not followed.

All written reports and log books must disclose and cite where appropriate the specific source(s) of the idea for the project. Citations must be fully documented with references such as author(s), date, publication, and URL, if website.

Participants must complete and post the following information in 14 pt. font on the front of their displays. “Outside sources” below means the student did not personally create the graphics. They came from or were modified from computer clip art, the internet, books, journal articles, or other printed or digital sources.

Photographs taken by:________________________
7. Complete NWDSD online registration. Print off the completed forms, make certain signatures are acquired, and return them with the appropriate registration fee by Monday February 23, 2015. Make checks out to Northwest Ohio District Science Day and address entries to: Dr. Mark J. Camp, Dept. of Environmental Sciences, MS # 604, The University of Toledo, Toledo, OH 43606-3390

8. Team projects are permitted for grades 5-12 at District 2 Science Day. The rules are as follows:

a. A team is limited to three (3) students. All students on a team must play an active role in the science experiment. Individuals should not be used solely for writing reports, making displays, etc.
b. Each student on a team, and in attendance, will receive the district’s usual recognition.
c. Points will be deducted for non-appearance of any team member on the day of judging.
d. Teams will be eligible for local sponsored awards; monetary awards will be divided among team members.

9. Sign up for a sponsored award and have other opportunities to be recognized. To view the 2015 sponsored awards click here. Important! These are not yet part of the online registration. Please note on a
separate sheet of paper the name of the sponsored award that best fits your project or research area.

10. Projects will be judged by professionals and well qualified individuals in the fields of science, mathematics, engineering, and education who volunteer their time to judge on Science Day. The judges use the following criteria set by the Junior Academy Council of the Ohio Academy of Science:

- Knowledge Achieved
- Effective Use of Scientific Method
- Clarity of Expression
- Originality and Creativity

You receive between 1 and 10 points for each of the four categories. The points are summed to form a rating category. The minimum number of points for each rating is:

- Superior 36
- Excellent 24
- Good 12
- Satisfactory 4

Team projects are judged in the four above categories plus a fifth category, teamwork.

11. If you receive a superior at NWDSN you may qualify to participate at State Science Day. Each district in the state of Ohio has a quota for students who can participate in State Science Day at the Ohio State University in Columbus, OH on May 9, 2015. The quota for our district is . The procedure for choosing students to fill this quota is:

1. All 7 to 12th graders with 40 points, in descending grade order (i.e. 12, 11, 10, 9, 8, 7) are chosen first.
2. All 7 to 12th graders with 39 points, in descending grade order are chosen next.
3. Next, students with 38 points are chosen in descending class order (grade 12, 11, 10, 9, 8, 7).
4. Then, students with 37 points are chosen in descending class order (grade 12,11,10,9,8,7).
5. Finally 7 to 12th graders with 36 points in descending grade level are chosen.
6. If there are more qualifiers in the final grade/numerical score division than quota positions, the final group will be determined by random draw (i.e. If there are 5 positions and 8 freshmen with 37’s, the 5 participants will be determined by random draw of these 8 students).

Alternates will be selected via random drawing following the same guidelines as above.

YOU OR A DESIGNATED REPRESENTATIVE MUST ATTEND THE AWARDS CEREMONY IN MEMORIAL FIELDHOUSE 100 (Auditorium) IF YOU PLAN ON GOING TO STATE SCIENCE DAY. YOU WILL BE GIVEN AN ENTRY PACKET AT THE AWARDS CEREMONY AND MUST MAIL THIS IN WITH RESPECTIVE FEES AS INSTRUCTED IN THE PACKET, POSTMARKED BY TUESDAY, MARCH 17, 2015. PLEASE READ THE INSTRUCTIONS INCLUDED WITH EACH ENTRY PACKET IMMEDIATELY AS THERE ARE IMPORTANT DEADLINES GIVEN.

Be advised that you will need internet access to complete SSD registration forms. Please contact Director Mark J. Camp at 419-530-2398 or mark.camp@utoledo.edu if you have problems.

Deciding on a Project or Research Area

Numerous books and web sites are available. Just remember that rules and stipulations are not the same in all science fairs; so follow the ones for NWDS. Below are some suggested web sources; just a sampling of what can be found. They each include many other links. Good luck!

Intel ISEF - tips and advice

National Student Research Center - with links to many sites

Agricultural Project Ideas
More Science Project Ideas

Yet another source of Science Project Ideas

Timetable for NWDSD March 14, 2015

- Arrive at Student Union by 8AM.
- Check-in at Registration Table Follow the signs
- Check-in is 7:30-8:45AM.
- Set up project at your assigned location. If you cannot find your spot ask one of the officials or come to the Registration Table for help.
- Judging begins at 9AM. Please stay at your project. You will be judged by a pair of general judges at some point who will eventually leave a yellow participation ribbon to signify that general judging of your project is complete. You may be visited by other judges evaluating projects for various sponsored or special awards. (Please note that sometimes, because of large numbers of applicants or another reason, sponsored award judges may not visit all applicants for an award.) If you have to leave your project for some reason, leave a note or inform the participant next to you, in case judges show up while you are gone. Please return quickly. You will receive a slip of paper if you are a winner of a sponsored award. This slip must be brought to the Awards Ceremony and presented to receive your award. Judging will be completed by noon.
- Please leave your projects on display until 1:30 so that they can be viewed by visitors.
- Assemble in Memorial Field House 100 in for the Awards Ceremony which begins at 2:30.
- Good Luck!