



MINNESOTA ACADEMY OF SCIENCE
—Promoting Excellence in Science—

Scientific Research Paper Competition JUDGE GUIDE

North Central Regional JSHS (High School) / Science and Engineering Fair (Middle School)

Welcome to Minnesota Academy of Science State Competitions!!

**We thank you for volunteering your time and expertise
to encourage the next generation of scientists!**

The MN Academy of Science North Central Regional Junior Science and Humanities Symposium (JSHS) and State Science & Engineering Fair Middle School paper competition are annual competitions that showcases Minnesota's best and brightest students in the fields of Science, Technology, Engineering & Math.

The North Central Junior Science and Humanities Symposia (JSHS) Program, is a competition for high school students, grades 9-12 sponsored in part by the Armed Services. The primary aims of the JSHS are to promote original research and experimentation in the sciences, engineering, and mathematics at the high school level, and to publicly recognize students for outstanding achievement. While the JSHS paper competition is for the High School students, the MN Academy of Science also includes a paper competition for middle school students in grades 6-8. Both divisions follow the rules and regulations set forth by National JSHS under the Academy of Applied Science. <http://www.jshs.org/guidelines.html>

Reading and understanding this document will help you with preparing to judge the student papers. Also, if you know other people who have judged for North Central Regional JSHS and the Minnesota State Science Fair in the past, you are encouraged to talk with them about their experiences. You will find judging has been a rewarding experience for them and they will have some good pointers for you.



State Science & Engineering Fair

Basic Information for Judges

Who can be a Paper Judge? Anyone who has a degree in a science, technology, engineering, or math (STEM) field, or years of experience in the field, is available on judging day, does NOT have children currently competing in JSHS or Middle School paper competition. You do not need to have previous judging experience. We LOVE first-time judges!! If you have a conflict of interest and are unable to judge, you are encouraged to sign up to be a general volunteer. Help us run the program competitions. Paper Judges for **high school JSHS** papers you must:

1. **Not** have any children competing in the current year of the MN State Science & Engineering Fair.
2. Hold a Ph.D., M.D., Pharm. D. or equivalent degree **OR** a B.A.,B.S. or Master's degree **and** a minimum of six years of professional experience in a scientific discipline related to one of the 17 project categories.

Paper Judges for **middle school** papers you must:

1. **Not** have any children competing in the current year of the MN State Science & Engineering Fair.
2. Have a B.A.,B.S. or Master's degree **and** a minimum of 2-3 years of professional experience in a scientific discipline related to one of the 17 project categories.

If you have any questions on whether or not you qualify to judge, please feel free to contact the MAS State Science & Engineering Fair Paper Judge Coordinator Paul Gustafson judge@mnmas.org

If you are unable to judge the current year because of conflict of interest, we highly encourage you to stay involved in the program by becoming a general volunteer. Contact the state science fair director for further details on general volunteering lise@mnmas.org .

What should I wear? This is a “professional” competition so dress accordingly! The high school students are often in business suits or dresses and the middle school students are in business-casual wear. Judges should dress similarly, *please no jeans*.

Will I get any training? Yes! Judge orientation is held on Saturday and Sunday before judging begins.

What if I get hungry? Judging on Saturday and Sunday will begin after lunch. JSHS judges have a 3:00-3:15pm refreshment break.

What is the Judging Schedule for Papers? On Saturday afternoon the JSHS high school paper presentations are scheduled for presentation by the students. Judging is done in several rooms by different teams of judges. On Saturday evening from 6-10:30pm, the top high school papers, selected from the afternoon presentations are called back for final judging. The final judging is then done in a single room.

On Sunday the middle school papers are presented and judged. This judging occurs from 12 noon to 6pm in several rooms by different teams of judges – just one round.

How are the students selected to present their papers? The students submit their papers to regional science fairs. The regional science fair selects the papers to be presented at the regional science fair. The high school and middle school students present their papers and the top paper presentations are then selected to compete at North Central Regional JSHS for high school or the State Science & Engineering Fair for middle school.

Only the top high school and middle school papers are eligible to present at the state paper competition.

JSHS Categories of Competition

The organization of the final seven (7) sessions at the National JSHS is based upon a review of all abstracts and the area of research suggested by the student. Student presenters must state on the abstract the major discipline and the sub-discipline of their research. The seven major disciplines in which military-sponsored scholarship awards will be made are:

- Environmental science (pollution and impact upon ecosystems, environmental management, bioremediation, climatology, weather)
- Engineering; technology (including renewable energies, robotics)
- Physical Sciences – physics; computational astronomy; theoretical mathematics
- Chemistry (including chemistry-physical, organic, inorganic; earth science-geochemistry; materials science, alternative fuels)
- Life sciences (general biology—animal sciences, plant sciences, ecology; cellular and molecular biology, genetics, immunology, biochemistry)
- Medicine and Health; Behavioral and Social Sciences

- Mathematics and Computer science/computer engineering; applied mathematics-theoretical computer science

Paper Judging: Overview

Judging Overview: The judging for the paper presentations is divided into a High School papers and Middle School papers. High School papers are judged on Saturday and Middle School Papers are judged on Sunday. Judges can volunteer for both days or just one of the days.

- (1) Judge Check-In and Training** Judges should report to the Judging Room. Judges will sign in and receive their scheduled room and papers they will be judging for the afternoon.. A short training session will be presented.
- (2) Afternoon Judging Session (High School / JSHS)** – Each Judge will be assigned a room together with several other judges. Typically in each room there will be 5-8 judges. This judging team will remain in the same room for the entire afternoon judging session. The students are each assigned a room and a time to present to the judges. There will be multiple rooms with student presentations in each room.

At the scheduled time for a student's presentation, the student will arrive at the room, quickly set up their presentation. Once the student is ready, a room moderator (one moderator assigned to each room) will initiate the start of the student's presentation. The room moderator is also responsible for keeping time, as each student is given 12 minutes to present their paper.

During the students presentation the judges are not to interrupt with questions. The students have only 12 minutes and will be required to stop their presentation at that time. Upon the completion of the student's presentation, the judges will be given a maximum of 6 minutes to ask questions of the student. Only Judges may ask questions, others present in the room shall not be asking questions of the student. The monitor will signal the end of the question and answer period.

The questioning period is to be used by you and the other judges to aid you in clarifying the student's depth of understanding, the amount of work and level of effort, and the individual contribution to the research problem. The length of time for questions is very short, the judges are asked to remember this. Judges also need to allow other judges to ask questions and not dominate the question and answer session. Remember questions which intend to harass the student speaker will not be allowed by the moderator.

Each judge will individually score each presentation on their scoring sheets during and just after each presentation. Following all of the presentations in your session, the judging team will remain in the room and deliberate to rank the papers

presented. Comparing and modifying your scoring sheets is allowed but each judge must submit their own scoring sheet for each paper presented.

Each judge is also asked to write comments on the Student comment sheet for each paper presentation (copy attached to this guide). This is the only feedback the students will receive and this feedback is very important to students.

Please write as many comments as you have time for, especially if a student scored particularly high or low in one or more categories. Please make certain you are writing specific comments. General comments “This was good” do not help the student. Specify what was good, what did you like, and specifically what should they do, if anything, for improvement? Try to make the comments positive and encouraging. Negative comments such as “your project does not deserve to be here” or “there is no way you did this work yourself” does not develop the student or their work.

(3) Breaks: There will be one short break from 3:00-3:15 p.m. on Saturday afternoon.

(4) Evening Judging Session (High School / JSHS): There is a single presentation room for the evening judging session and all presentations will occur in that one room. The judging will be done the same way as the afternoon judging session, with a team of judges in the room listening to the presentation and then asking questions of the presenter.

Again, each judge will score each presentation on their scoring sheet during and just after the presentation. Following the sessions, the judging team in the room, will meet and deliberate to select finalists. Judges during this call-back session are also asked to fill out a judge’s comment sheet for each of the presentations.

Sunday Middle School Paper Judging – The Middle School papers are all presented and judged during the Sunday afternoon judging session.

(1) Judge Check-In and Training Judges should report to the Judging Room. Judges will sign in and receive their scheduled room and papers they will be judging for the afternoon. A short training session will be presented.

(2) Afternoon Judging Session (Middle School) – Each Judge will be assigned a room together with several other judges. Typically in each room there will be 3-6 judges. This judging team will remain in the same room for the entire afternoon judging session. The students are each assigned a room and a time to present to the judges. There will be multiple rooms with student presentations in each room.

At the scheduled time for a student's presentation, the student will arrive at the room, quickly set up their presentation. Once the student is ready, a room monitor/moderator (one moderator assigned to each room) will initiate the start of the student's presentation. The room moderator is also responsible for keep time, as each student is given 12 minutes to present their paper.

During the students presentation the judges are not to interrupt with questions. Upon the completion of the student's presentation, the judges will be given a maximum of 6 minutes to ask questions of the student. Only Judges may ask questions, others present in the room shall not be asking questions of the student. The monitor will signal the end of the question and answer period. The questioning period is to be used by you and the other judges to aid you in clarifying the student's depth of understanding, the amount of work and level of effort, and the individual contribution to the research problem. The length of time for questions is short, the judges are asked to remember this. Judges also need to allow other judges to ask questions and not dominate the question and answer session. Remember questions which intend to harass the student speaker will not be allowed by the moderator.

Each judge will individually score each presentation on their scoring sheets during and just after each presentation. Following all of the presentations in your session, the judging team will remain in the room and deliberate to rank the papers presented. Comparing and modifying your scoring sheets is allowed but each judge must submit their own scoring sheet for each paper presented.

Each judge is also asked to write comments on the student's comment sheet for each presentation (copy attached to this guide). This is the only feedback the students will receive and this feedback is very important to students. Please write as many comments as you have time for, especially if a student scored particularly high or low in one or more categories. Please make certain you are writing specific comments. General comments "This was good" do not help the student. Specify what was good, what did you like, and specifically what should they do, if anything,

for improvement? Try to make the comments positive and encouraging. Negative comments such as “your project does not deserve to be here” or “there is no way you did this work yourself” does not develop the student or their work.

Scoring: Paper Judges for both the High School and Middle School papers score students using the same judges scoring criteria and comment form. (Copies attached to this guide)

Judging criteria: Judges evaluate the oral presentations using the following criteria. Judges will use a total score of 30 points for each of the six criteria with each criteria weighted on a scale from 1 to 5. The scores are tallied for each presenter and used as the basis for discussion among judging team members where each criterion is considered.

Statement and identification of research problem

- Scientific or engineering thought; Creativity and originality
- Research or engineering design, procedures, results
- Discussion/conclusions
- Skill in communicating the research results -- Oral presentation and written reports
- Acknowledgement of sources and major assistance received

Attached to this guide, is a copy of the judging scoring sheet. Within the scoring sheet is the judging criterion. Under each section are bullet points which better describe the judging tests/questions to apply during your judging.

Judge scoring is inherently subjective (judges may be impartial scientists, but we are still HUMAN!). As you score the paper presentations, the presentation you score the highest, should be the best presentation you have judged and the lowest score you give, should represent the weakest presentation that you judged.

It is okay for judges to confer with other judges on scoring and judging. Each judge shall provide their own opinion with their scoring however, conferring with other judges and asking their opinions is acceptable.

Please remember to be discreet when discussing students and their projects. Do not talk about student presentation while other students are setting up for their presentation or audience members who are not judges, are in the room. Also avoid making comments in elevators, hallways, or elsewhere, as finalists, parents or adult chaperones might overhear. Results are confidential until announced at the awards ceremonies.

Judges Tips & Issues

The judges and the judging experience make the North Central Regional JSHS and the State Science Fair for the students. The students, especially the middle school students, are in awe of the judges. The comments you make will most likely impact students for a long time. One “bad judge” can destroy a student’s love of science for life, while a positive comment from a judge can launch a student on a life time of discovery!

1. Provide a good experience for the students: This is more than a competition; it’s an educational and motivational experience for the students. The high point of the science fair experience for most students is being interviewed by judges!! You are an evaluator in the student’s field, a counselor, a motivator, and a role model with three main ways to communicate with the students:

Behavior: Be genuine and let the students show their stuff, don’t be the judge whose behavior or comment turns a student off science forever!

Interview: Put the student at ease...smile! During the question / answer session, ask students about their project, show you are interested, and let the student teach you something. Do not treat a student’s research lightly or display boredom toward research you consider unimportant. Avoid the use of jargon common to your area of expertise.

Feedback: **Please make certain you are writing specific comments.** General comments “This was good” do not help the student. Specify what was good, what did you like, and specifically what should they do, if anything, for improvement? Try to make the comments positive and encouraging. Negative comments such as “your paper does not deserve to be here” or “there is no way you did this work yourself” does not develop the student or their work.

2. Choose the Best, Encourage the Rest! Examine the quality of the student’s work and determine how well the student understands the research and area of study in each category listed on the scoring sheets. Focus on awarding points for things done instead of penalizing the student for NOT doing something.

3. Be consistent with your scoring: Every judge scores a little (or a lot!) differently from other judges; you should make an effort to judge your papers consistently – don’t worry about matching another judge’s scores! Be sure to go back through your scores after judging all the papers and make sure that your final scores correspond with the order in which you would rank your paper presentations. Revision of scores is expected (and encouraged!) since revision leads to more consistent evaluation papers. Examine the quality of the student’s work, and evaluate how well the student understands his or her research and area of study.

4. **Scientific Method (Process):** Research other than the engineering category that design and build, may use the scientific method. The steps of the scientific method include;

- Asking a question(s)
- Doing background research
- Constructing and supporting a hypothesis
- Testing the hypothesis by doing an experiment (repeating trials if required)
- Analyzing the data and drawing conclusion(s)
- Communicating the results

Often the experiment will involve changing only one factor (variable) and keeping the other factors the same. There are many creditable multi-variable studies, but the student should be able to explain how they controlled the variables within the research.

5. **Engineering Design Process:** Engineering papers that design and build, may follow this process. The steps of the Engineering Design Process include;

- Defining the problem
- Doing background research
- Specifying the requirements
- Creating alternative solutions
- Choosing the best solution
- Doing development work
- Building a prototype
- Testing and redesigning the prototype

During the engineering design process, designers frequently jump back and forth between steps. This process is called iteration.

6. **Mentored Research:** Student scientific research may have been mentored by a teacher, parent or scientist and completed at home, at a school laboratory or completed at a research lab. Mentoring helps encourage the students and may provide a solid foundation for their research, but how can you as a judge provide a level playing field for all papers? It is very important in the evaluation of the paper presented to determine how much guidance was provided to the students in the design and implementation of their research.

To help you determine this, each student who performed their research at a research institution will have submitted a statement of outside assistance along with their research paper. This along with a copy of the paper's abstract will be provided to the judges to review prior to the paper presentation.

For ALL papers presented it's up to you, as a judge, to determine how much of this work is the student's work and how much is the mentor's, teacher's scientist's or parent's work and then generate a score based on the student's portion. Talk with the student, ask him or her leading questions and use your Judge's Score Sheet as a guide; this will

help keep the playing field level, yet allow those students who really excel at science to succeed!!

7. **Team Research:** Students may present on work done as part of a class project, or as a science fair project or summer research project. However, students should report on their individual contributions to research. If students are part of a larger group, the presentation should focus on the individual contributions in the larger research project and properly acknowledge the contributions of the other students, mentors, and/or teachers. For team research that cannot be divided into individual presentations, a single team leader must be selected to present the results of group work. The judges' evaluations and scores will be based upon the individual presenter.

8. **Conflicts of Interest:** Typical conflicts of interest are with judges knowing the students you are judging or having a relationship with the student's mentor, teacher and/or parent. As part of the registration process for becoming a MN Science and & Engineering Fair judge you agreed to follow the Minnesota Academy of Science ethics statement. A copy of this statement is included near the end of this document. Anytime before or during judging you identify a potential conflict of interest, you must contact the MAS Judge Coordinator and explain to them the potential conflict of interest. Parents or Grandparents of students presenting at the fair may not judge projects this year. Please review the Judges Ethics Statement attached to this document.

We welcome you to become a general volunteer if you are unable to judge due to a conflict of interest.

Sample Judges Questions

Sample Questions To Judge Creativity/Originality:

- Why is this project important to you?
- Where did you get the idea for your project?
- What did you enjoy most about your project?
- Of what value is your project to society?
- What problems arose during your investigation?
- How did you overcome them?
- Do your results indicate further study is needed?
- What do you feel is creative or special about your project?

To Judge Scientific Thought or Engineering Goals:

- What is the purpose/objective/problem of your study?
- What have previous studies done to solve your question/problem?
- How is your project different from those studies?
- What are possible sources of error?
- What are limitations of your project?
- What is/are variables and how did you control the variables?
- Why did you do the statistical analysis you did? (if stats are applicable)

To Judge Thoroughness:

- How many times did you repeat your tests/trials?
- On what did you base your conclusions?
- Are there any other approaches you might have taken in your research?
- How much time did your study take?

To Judge Skill:

- What instruments did you use to take your measurements?
- How did those instruments work?
- Who helped with your project?
- What was the hardest part of your project?
- What would you do differently if you did your project again?

Note: It is important not to show the student how much you know, but rather ask questions to learn what the student knows. This is especially important when judging Middle School Students. While there are many good Middle School papers, these students typically are just getting started with science and will not have the same communication skills, understanding and vocabulary of a high school student. Remember to ask questions but do not go so far as to make the student feel they don't belong, are not worthy or not smart enough for science. Your questions and comments will make a great difference in the student's future approach to science.

**Minnesota Academy of Science
North Central Regional Junior Science & Humanities Symposium (JSHS)
Judges Score Sheet and Criteria**

Name of Student: _____ Name of Judge: _____

TOTAL SCORE: _____/30

Judging Criteria	Possible Points	Points Awarded
Statement and identification of research problem <ul style="list-style-type: none"> • Is the problem clearly stated? • Does the presenter demonstrate understanding of existing knowledge about the research problem? 	1-5 pts	
Scientific thought, creativity, and originality <ul style="list-style-type: none"> • Process skills demonstrated by the student in the solution to the research problem and/or the research design • Student demonstrates his or her individual contributions to and understanding of the research problem • Level of effort 	1-5 pts	
Research design, procedures, materials, methods, and results <i>For scientific method only</i> <ul style="list-style-type: none"> • Appropriateness of research design and procedures • Identification and control of variables • Reproducibility <i>For engineering Design only</i> <ul style="list-style-type: none"> • Workable solutions that are acceptable to potential users • Recognition of economic feasibility of solution • Recognition of relationship between design and end product • Tested for performance under conditions of use • Results offer an improvement over previous alternatives 	1-5 pts	
Discussion and conclusions <ul style="list-style-type: none"> • Clarity in stating conclusion • Logical conclusion that is relevant to the research problem and results of experimentation or testing • Recognizes limits and significance of results • Evidence of student's understanding of the scientific or technological principles • Theoretical or practical implications recognized • What was learned? 	1-5 pts	
Skill in communication research results <ul style="list-style-type: none"> • Clarity in communicating research results to non-specialized audience and to judges • Definition of terms as necessary • Appropriate use of audio-visuals • Response to questions from audience and judges 	1-5 pts	
Acknowledgement of sources and major assistance received <ul style="list-style-type: none"> • Did the student properly cite any sources referenced? • Did the student acknowledge their research advisors and/or lab assistants? 	1-5 pts	



Minnesota Academy of Science
Junior Science & Humanities Symposium (JSHS)
Judges Comment Form



Note: This sheet WILL be returned to the students and will be the only written feedback they get from the judges. Please make at least one constructive comment in each section. Use the back of this sheet if necessary.

Name of Student(s): _____ Judge #: _____

STATEMENT AND IDENTIFICATION OF RESEARCH PROBLEM Is the problem clearly stated? Does the presenter demonstrate understanding of existing knowledge about the research problem?

SCIENTIFIC THOUGHT, CREATIVITY, AND ORIGINALITY Process skills demonstrated by the student in the solution to the research problem and/or the research design. Student demonstrates his or her individual contributions to and understanding of the research problem. Level of effort.

RESEARCH DESIGN, PROCEDURES (MATERIALS & METHODS), RESULTS

(1) **SCIENCE** – Appropriateness of research design and procedures. Identification and control of variables. Reproducibility. (2) **ENGINEERING** – Workable solution that is acceptable to a potential user. Recognition of economic feasibility of solution. Recognition of relationship between design and end product. Tested for performance under conditions of use. Results offer an improvement over previous alternatives.

DISCUSSION/CONCLUSIONS Clarity in stating conclusion. Logical conclusion that is relevant to the research problem and the results of the experimentation or testing. Recognizes limits and significance of results. Evidence of student's understanding of the scientific or technological principles. Theoretical or practical implications recognized. What was learned?

SKILL IN COMMUNICATING RESEARCH RESULTS Clarity in communication research results to non-specialized audience and to judges. Definition of terms as necessary. Appropriate use of audio-visuals. Response to questions from audience and judges.

If you have additional feedback for students, please continue on the back of this form.

**Minnesota Academy of Science
Middle School Papers Competition
Judges Score Sheet and Criteria**

Name of Student: _____ Name of Judge: _____

TOTAL SCORE: _____/30

Judging Criteria	Possible Points	Points Awarded
Statement and identification of research problem <ul style="list-style-type: none"> • Is the problem clearly stated? • Does the presenter demonstrate understanding of existing knowledge about the research problem? 	1-5 pts	
Scientific thought, creativity, and originality <ul style="list-style-type: none"> • Process skills demonstrated by the student in the solution to the research problem and/or the research design • Student demonstrates his or her individual contributions to and understanding of the research problem • Level of effort 	1-5 pts	
Research design, procedures, materials, methods, and results For <i>scientific research</i> projects only <ul style="list-style-type: none"> • Appropriateness of research design and procedures • Identification and control of variables • Reproducibility For <i>engineering</i> projects only <ul style="list-style-type: none"> • Workable solutions that are acceptable to potential users • Recognition of economic feasibility of solution • Recognition of relationship between design and end product • Tested for performance under conditions of use • Results offer an improvement over previous alternatives 	1-5 pts	
Discussion and conclusions <ul style="list-style-type: none"> • Clarity in stating conclusion • Logical conclusion that is relevant to the research problem and results of experimentation or testing • Recognizes limits and significance of results • Evidence of student's understanding of the scientific or technological principles • Theoretical or practical implications recognized • What was learned? 	1-5 pts	
Skill in communication research results <ul style="list-style-type: none"> • Clarity in communicating research results to non-specialized audience and to judges • Definition of terms as necessary • Appropriate use of audio-visuals • Response to questions from audience and judges 	1-5 pts	
Acknowledgement of sources and major assistance received <ul style="list-style-type: none"> • Did the student properly cite any sources referenced? • Did the student acknowledge their research advisors and/or lab assistants? 	1-5 pts	

Revision 12/2/2015



**Minnesota Academy of Science
State Science Fair Middle School Papers
Judges Comment Form**

*Note: This sheet WILL be returned to the students and will be the only written feedback they get from the judges.
Please make at least one constructive comment in each section. Use the back of this sheet if necessary.*

Name of Student(s): _____ Judge #: _____

STATEMENT AND IDENTIFICATION OF RESEARCH PROBLEM Is the problem clearly stated? Does the presenter demonstrate understanding of existing knowledge about the research problem?

SCIENTIFIC THOUGHT, CREATIVITY, AND ORIGINALITY Process skills demonstrated by the student in the solution to the research problem and/or the research design. Student demonstrates his or her individual contributions to and understanding of the research problem. Level of effort.

RESEARCH DESIGN, PROCEDURES (MATERIALS & METHODS), RESULTS

(1) **SCIENCE** – Appropriateness of research design and procedures. Identification and control of variables. Reproducibility. (2) **ENGINEERING** – Workable solution that is acceptable to a potential user. Recognition of economic feasibility of solution. Recognition of relationship between design and end product. Tested for performance under conditions of use. Results offer an improvement over previous alternatives.

DISCUSSION/CONCLUSIONS Clarity in stating conclusion. Logical conclusion that is relevant to the research problem and the results of the experimentation or testing. Recognizes limits and significance of results. Evidence of student's understanding of the scientific or technological principles. Theoretical or practical implications recognized. What was learned?

SKILL IN COMMUNICATING RESEARCH RESULTS Clarity in communication research results to non-specialized audience and to judges. Definition of terms as necessary. Appropriate use of audio-visu-als. Response to questions from audience and judges.

Revision 12/2/2015

Minnesota Academy of Science **Volunteer / Judge Ethics Statement**

MN Academy of Science Volunteer Ethics Statement:

Those serving as volunteers, judges or general volunteers for the MN Academy of Science do so as responsible professional scientists, educators, or have an interest in student research in STEM areas. As such it is expected that they will conduct themselves in a positive and ethical manner that students might emulate. Each student encountered is to be treated respectfully and without exploitation. Privileged information or ideas that are obtained through this volunteer service must be kept confidential and not be used for competitive gain. All volunteers should disclose conflicts of interest resulting from direct competitive, collaborative or other relationships with any of the students and recuse oneself from any case in which conflicts preclude an objective evaluation. The trust conferred on each volunteer for the advancement of student learning must be valued at the highest level to retain the integrity of the educational process it supports.

I acknowledge that I have read and agree to abide by the [MN Academy of Science sexual harassment policy](#) protecting all MN Academy of Science State Science and Engineering fair and JSHS participants from harassment and sexual harassment by another State Science & Engineering Fair or JSHS participant for any reason including, but not limited to: age, national origin, race, color, religion, gender, sexual orientation, marital status, disability, ancestry and/or veteran status and understand MAS's responsibility to investigate such claims.

MAS Programs Harassment Policy

General

MAS prohibits harassment of any student, volunteer, or employee by another student, volunteer, employee or third party for any reason including, but not limited to: age, national origin, race, color, religion, gender, sexual orientation, marital status, disability, ancestry and/or veteran status. Harassment includes but is not limited to slurs, epithets, threats, derogatory comments, unwelcome jokes, and teasing. Any person who feels that he or she is a victim of such harassment at an MAS program should promptly report the matter to an MAS employee or other adult authority who will immediately present to the proper authority. Upon receipt of any allegation(s), an investigation will be initiated. All such reports will be handled as confidentially as possible. MAS may take appropriate disciplinary action against any person found to have violated the harassment policy. No adverse action or retaliation will be allowed to be taken against a person who reports a violation or who participates in an investigation of this policy in good faith.

Sexual

Sexual harassment of or by any person in attendance at an MAS program is prohibited. Sexual harassment includes but is not limited to unwelcome sexual advances, requests for sexual favors, and/or verbal or physical conduct of a sexual nature including, but not limited to, drawings, pictures, jokes, teasing, or uninvited touching.

In accordance with this policy, unwelcome sexual advances, requests for sexual favors, sexual demands, or other verbal or physical conduct of a sexual nature will constitute sexual harassment when:

- The conduct has the purpose or effect of unreasonably interfering with an affected person's performance, or creating an intimidating, hostile, or offensive environment; or in third party situations, one or more individuals are reasonably offended by the sexual interaction, conduct, or communications between others.
- The conduct has the effect of creating actual, perceived, or potential conflicts of interest, favoritism, disruption or lack of objectivity.

If an MAS employee or adult volunteer becomes aware of such a situation, he or she is under a responsibility to contact the proper authority. Knowingly false accusations are prohibited and will be treated by disciplinary action comparable to that which would be applied to actual misconduct.

Certification

I certify that all of the information given in this application is correct. I certify that I have read and fully understand the eligibility requirements, duties and responsibilities and time commitment necessary to serve on the MAS State Science & Engineering Fair or JSHS Committee as general volunteer or judge. Finally, I have read the above volunteer ethical statement and MAS Program Harassment Policy and agree to adhere to these principles should I be selected to serve.

Signature of General Volunteer or Judge

Date



MINNESOTA ACADEMY OF SCIENCE

—Promoting Excellence in Science—

GUIDE FOR PAPER JUDGES

ENJOY

**your experience as judge at the
Minnesota Academy of Science North Central Regional JSHS
and State Science and Engineering Fair!!**

**We, again thank you for volunteering your time and expertise
to encourage the next generation of scientists!**

The Judging Committee welcomes your feedback on this guide or any other comments or concerns you might have about the judging procedure. YOU, the judge, are an important piece of the MN Academy of Science State Science & Engineering fair!!

Please let us know what we can do to make your experience the best it can be by contacting Paul Gustafson, Judge Coordinator judge@mnmas.org or the State Science & Engineering fair director: lise@mnmas.org

Revision 12/2/2015