

# North Dakota State Agriscience Fair Judging Rubric (9-12<sup>th</sup>)

Student(s): \_\_\_\_\_ Chapter: \_\_\_\_\_

Category: \_\_\_\_\_ Division: \_\_\_\_\_

Area	High Points 5-4 points	Medium Points 3-2 points	Low Points 1-0 points	Points Possible	Points Earned
<b>Knowledge Gained</b>	There is evidence the student researcher(s) have acquired scientific skills and/or knowledge by doing this project.	The is some evidence that the student researcher(s) have acquired scientific skills and/or knowledge by doing this project.	There is no evidence that the student researcher(s) have acquired scientific skills and/or knowledge by doing this project.	15 pts	_____ x 3 =_____ _____
<b>Scientific Research</b>	The problem is clearly stated. The researcher(s) use scientific facts as a basis for new conclusions. The researcher(s) are aware of the basic scientific principles that lend support to the methods used and conclusions reached. The research is the basis for further study. The appropriate methods and scientific design have been applied. The researcher(s) are aware of the empirical method and the importance of controlling the variables in order to reach valid conclusions.	The problem is not clearly stated. The researcher(s) use some scientific facts as a basis for new conclusions. The researcher(s) have limited knowledge of the basic scientific principles that lend support to the methods used and conclusions reached. With some modification, the research could be the basis for further study. Some of the appropriate methods and scientific design have been applied. The researcher(s) are partially aware of the empirical method and the importance of controlling the variables in order to reach valid conclusions.	The problem is not stated. The researcher(s) do not use scientific facts as a basis for new conclusions. The researcher(s) are unaware of the basic scientific principles that lend support to the methods used and conclusions reached. The research cannot be the basis for further study. Inappropriate methods and a flawed scientific design have been applied. The researcher(s) are unaware of the empirical method and do not recognize the importance of controlling the variables in order to reach valid conclusions.	30 pts	_____ x 6 =_____ _____
<b>Collaboration</b>	There is clear evidence of collaboration. The student researcher(s) identified portions of the project representing the work of others.	There is lack of clear evidence of collaboration or the student researcher(s) do not identify portions of the project representing the work of others.	There is lack of clear evidence of collaboration and the student researcher(s) do not identify portions of the project representing the work of others.	15 pts	_____ x 3 =_____ _____
<b>Thoroughness/ Information</b>	The researcher(s) clearly communicate the original plan and adaptations that may have been made to the study. Facts and principles the researcher(s) state are correct and accurate. All results of the experiments are reported accurately based on methodology used. Any errors and weaknesses in the study are identified, if applicable.	The researcher(s) partially communicate the original plan and adaptations that may have been made to the study. Facts and principles the researcher(s) state are partially correct and accurate. Most results of the experiments are reported accurately based on methodology used. Most errors and weaknesses in the study are identified, if applicable.	The researcher(s) do not communicate the original plan and adaptations that may have been made to the study. Facts and principles the researcher(s) state are inaccurate. Results of the experiments are not reported accurately based on methodology used. Errors and weaknesses in the study are not identified.	30 pts	_____ x 6 =_____ _____

<b>Results/ Conclusions</b>	The student researcher(s) use known facts to draw conclusions. Conclusions are consistent with the data and/or observations presented. The student researcher(s) clearly share what was learned as a result of the research. The student researcher(s) effectively communicate the results and impact of the study.	The student researcher(s) use known facts to draw conclusions. Conclusions are inconsistent with the data and/or observations presented. The student researcher(s) ineffectively share what was learned as a result of the research. The student researcher(s) ineffectively communicate the results and impact of the study.	The student researcher(s) do not use known facts to draw conclusions. Conclusions are inconsistent with the data and/or observations presented. The student researcher(s) do not share what was learned as a result of the research. The student researcher(s) do not communicate the results and impact of the study.	15 pts	_____ x 3 =
<b>Visual Display</b>	The data is presented in the best manner for the particular type of information involved. No spelling errors are present. The exhibit demonstrates general neatness and attractiveness. The display is presented in a logical and interesting manner.	The data is presented in a logical manner for the particular type of information involved. Some spelling errors are present. The exhibit lacks general neatness and attractiveness. The display is presented in a logical yet uninteresting manner.	The data is not presented in a rational manner for the particular type of information involved. Several spelling errors are present. The exhibit lacks general neatness and attractiveness. The display lacks logic and appears uninteresting.	15 pts	_____ x 3 =
<b>Total Presentation Score (120 pts possible)</b>					

### Written Report Score

Area		Points Possible	Points Earned
<b>Abstract</b>	Abstract is brief and concisely describes the <b>purpose, methods, results</b> and <b>conclusions</b> . Abstract <i>does not include cited references</i> . Abstract is no longer than one page. Arrangement makes the purpose, procedure, results and conclusions clear.	2 pts	
<b>Introduction</b>	Introduction answers the question “Why was the work done?” It clearly <b>states the problem</b> that justifies conducting the research, the <b>purpose</b> of the research, its <b>impact on agriculture</b> , the <b>findings of earlier work</b> and the <b>general approach and objectives</b> .	5 pts	
<b>Literature Review</b>	The literature review details what information currently exists concerning the research project. It should include cited information such as similar studies and research methods, history, and other information that support the current knowledge base for the topic and how the project might complement existing information.	5 pts	
<b>Materials and Methods</b>	Clearly written to enable others to replicate the study and results. Section is <b>written in third person</b> , encompasses all <b>materials required</b> , states the <b>hypothesis/research questions</b> and explains the <b>study design</b> . If used, the statistical procedures are included.	8 pts	
<b>Results</b>	Written results of the project are summarized. Trends and relationships are clearly addressed. <i>No conclusions are made in this section</i> . Data that can stand alone in the form of tables and/or figures are included.	12 pts	
<b>Discussion and Conclusions</b>	Brief recap of the results is included. Conclusions are based on results, incorporates previous literature, and relates directly to the hypothesis. Discussion provides recommendations for future research and impact on the agriculture industry.	12 pts	
<b>References</b>	References contain significant, published and relevant sources.	2 pts	
<b>Acknowledgements</b>	Detailed list or paragraph is included acknowledging anyone who assisted with any aspect of the project and how they helped.	2 pts	
<b>APA Style/Spelling</b>	APA citation style writing is used throughout the written report. No spelling or grammar errors are present.	2 pts	
<b>Total Written Report Score (50 pts possible)</b>			
<b>Total Score (presentation + written report=170 pts. possible)</b>			