

# References and Resources

## Agriscience Fair Prequalifying Score Sheet

Student(s) : \_\_\_\_\_ State: \_\_\_\_\_

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

Each category should be scored separately as determined by point values listed. The total possible score for the entire sheet is 100 points.

\_\_\_\_\_ 5 pts. Title Page: Title precisely describes the work with no more than 3 lines and 15 words maximum. All numbers, chemical elements and compounds should be spelled out. Page should include student name, grade, school and school address.

\_\_\_\_\_ 10 pts. Abstract: Abstract is brief and concisely describes the purpose, methods, results and conclusion. Abstract should not include the title or cited references. It should be no longer than one page. Arrangement of information should make the purpose, procedure and conclusion clear.

\_\_\_\_\_ 10 pts. Introduction: Introduction should answer the question "Why was the work done?" It should clearly state the problem that justifies conducting the research, the purpose of the research, the findings of earlier work and the general approach and objectives. It should include the hypothesis/objectives and/or predictions.

\_\_\_\_\_ 20 pts. Materials and Methods: The materials and methods section should enable others to reproduce the results by duplicating the study. It should be written in third person and encompass all of the materials required. It should include statistical procedure if employed.

\_\_\_\_\_ 20 pts. Results: This section should be a summary of the results the project has produced. Trends and relationships are clearly addressed, but no conclusions should be made. Section should include data (tables, figures) that can stand alone and include headings, labels and proper units of measure. Captions for each table are placed above the table and a caption for a figure is placed below the figure. Both are at least two point sizes smaller than the point size of the figure's text and are single spaced.

\_\_\_\_\_ 25 pts. Discussion/Conclusions: This section should show that the conclusions were drawn from the results of the study and how the results relate to the hypothesis. It should contain a brief recap of the results and show how the results were a foundation for the study. Explanations should be clear if the results were not as expected. Sound reasoning is used to make conclusions that rely on both literature and results. Discussion should reference facts and figures from results section. Conclusion should be editorial in nature.

\_\_\_\_\_ 5 pts. References/Literature Cited: References should contain significant, published and relevant sources. Proper approved format is utilized; e.g., APA, MLA or Chicago.

\_\_\_\_\_ 5 pts. Acknowledgements: This section should include a list or paragraph acknowledging anyone who helped in any aspect of the project and how they helped.

\_\_\_\_\_/100 TOTAL SCORE

In the event of a tie, qualification for the agriscience fair will be based on the scores received in the following sections in order: Discussions/Conclusions; Results; Materials and Methods.

## Agriscience Fair Prequalifying Rubric

| Area                | Total Points Possible   | High Points 5-4   | Medium Points 3-2  | Low Points 1-0   | Points Earned                 |
|---------------------|-------------------------|---|--|--|-------------------------------|
| <b>Title Page</b>   | 5 Points                | Title precisely describes the work with no more than 3 lines and 15 words maximum. All numbers, chemical elements and compounds should be spelled out. Page should include student name, grade, school and school address. No spelling or grammar errors are pre-                               | Title vaguely describes the work with no more than 3 lines and 15 words maximum. All numbers, chemical elements and compounds should be spelled out. Page should include student name, grade, school and school address. Minor spelling or grammar errors are  | Title poorly describes the work and includes more than 3 lines and 15 words maximum. All numbers, chemical elements and compounds are not spelled out. Page should include student name, grade, school and school address. Excessive spelling or grammar er-   |                               |
| Area                | Total Points Possible   | High Points 5-4   | Medium Points 3-2  | Low Points 1-0   | Points Earned                 |
| <b>Abstract</b>     | 10 Points Weighted Area | Abstract is brief and concisely describes the purpose, methods, results and conclusion. Abstract does not include the cited references. Abstract is no longer than one page. Arrangement makes the purpose, procedure and conclusion clear. No spelling or grammar errors are present.          | Abstract describes the purpose, methods, results and conclusion. Abstract does not include the cited references. Abstract is longer than one page. Arrangement makes the purpose, procedure and conclusion vague. Minor spelling or grammar errors are present.                                      | Abstract is poorly describes the purpose, methods, results and conclusion. Abstract includes the cited references. Abstract is longer than one page. Arrangement makes the purpose, procedure and conclusion are not clear. Excessive spelling or grammar errors are present.                            | $\frac{\quad}{2} \times$<br>= |
| Area                | Total Points Possible   | High Points 5-4   | Medium Points 3-2  | Low Points 1-0   | Points Earned                 |
| <b>Introduction</b> | 10 Points Weighted Area | Introduction answers the question "Why was the work done?" and clearly states the problem that justifies the research being conducted, purpose of research, findings of earlier work, general approach and objectives. Hypothesis is clearly stated. No spelling or grammar errors are present. | Introduction answers the question "Why was the work done?" and vaguely states the problem that justifies the research being conducted, purpose of research, findings of earlier work, general approach and objectives. Hypothesis is unclearly stated. Minor spelling or grammar errors are present. | Introduction does not answers the question "Why was the work done?" and does not states the problem that justifies the research being conducted, purpose of research, findings of earlier work, general approach and objectives. Hypothesis is not stated. Excessive spelling or grammar errors are pre- | $\frac{\quad}{2} \times$<br>= |

| Area                  | Total Points Possible   | High Points 5-4   | Medium Points 3-2  | Low Points 1-0  | Points Earned |
|-----------------------|-------------------------|---|--|---|---------------|
| Materials and Methods | 20 Points Weighted Area | Not written clearly to enable others to reproduce the results duplicating the study. Section may or may not be written in third person and encompasses all materials required for the research. The statistical procedure are included but are unclear. Minor spelling or grammar errors are present.   | Clearly wrote to enable others to reproduce the results duplicating the study. Section is written in third person and encompasses all materials required for the research. If used, the statistical procedure is included. No spelling or grammar errors are present.  | Written poorly so that others cannot reproduce the results duplicating the study. Section is not written in third person and does not encompass all materials required for the research. The statistical procedure are not included. Excessive spelling or grammar errors are present.                              | X4<br>=<br>-  |
| Area                  | Total Points Possible   | High Points 5-4   | Medium Points 3-2  | Low Points 1-0  | Points Earned |
| Results               | 20 Points Weighted Area | Results of the project are summarized. Trends and relationships are clearly addressed. No conclusions are made in this section. Data that can stand alone in the form of tables and/or figures are included. Tables/figures should have headings, labels and proper use of measurement. Captions are included for each table/figure and are at least 2 font sizes smaller than font in table/figure and are single spaced. No spelling or grammar errors are present. | Results of the project are incompletely summarized. Trends and relationships are vague. No conclusions are made in this section. Data that can stand alone in the form of tables and/or figures are somewhat included. Tables/figures should have headings, labels and proper use of measurement. Captions are included for each table/figure and are at least 2 font sizes smaller than font in table/figure and are single spaced. Minor spelling or grammar | Results of the project are poorly summarized. Trends and relationships are not addressed. Data that is not appropriately included as tables and figures and lacks heading, labels and proper use of measurement. Captions are not included for each table/figure. Excessive spelling or grammar errors are present. | X4<br>=<br>-  |

| Area                            | Total Points Possible         | High Points 5-4  | Medium Points 3-2  | Low Points 1-0   | Points Earned                 |
|---------------------------------|-------------------------------|--|--|--|-------------------------------|
| Discussion/<br>Conclusion       | 25 Points<br>Weighted<br>Area | Conclusions are clearly drawn directly from the results of the study and relate directly to the hypothesis. Brief recap of the results is included and shown how they were foundation of the study. Sound reasoning is shown that conclusions are based on results and literature. Discussion refers to facts and figures in the results section. No spelling or grammar errors are present. | Conclusions are unclear drawn directly from the results of the study and parallelly relate directly to the hypothesis. Brief recap of the results is included and shown how they were foundation of the study. Unsound reasoning is shown that conclusions are based on results and literature. Discussion refers to facts and figures in the results section. Minor spelling or grammar errors are present. | Conclusions are not drawn directly from the results of the study and do not relate directly to the hypothesis. No recap of the results is included or poorly shows how they were foundation for the study. Conclusions are not based on results or literature. Discussion poorly refers to the facts and figures in the results section. Excessive spelling or grammar errors are present. | $\frac{\quad}{5} \times$<br>= |
| Area                            | Total Points Possible         | High Points 5-4  | Medium Points 3-2  | Low Points 1-0   | Points Earned                 |
| References/<br>Literature Cited | 5 Points                      | References listed are significant, published and relevant sources. APA citation style is used. No spelling or grammar errors are present.  | References listed are somewhat significant, published and relevant sources. APA citation style is used. Minor spelling or grammar errors are present.  | References listed are not significant, published and relevant sources. APA citation style is not used. Excessive spelling or grammar errors are present.   |                               |
| Area                            | Total Points Possible         | High Points 5-4  | Medium Points 3-2  | Low Points 1-0   | Points Earned                 |
| Acknowledgements                | 5 Points                      | Detailed list or paragraph is included acknowledging anyone who assisted with any aspect of the project and how they helped. No spelling or grammar errors are present.  | A list or paragraph is included acknowledging anyone who assisted with any aspect of the project. Minor spelling or grammar errors are present.  | A list or paragraph is not included acknowledging anyone who assisted with any aspect of the project and how they helped. Excessive spelling or grammar errors are present.  |                               |
| <b>Total Points = 100</b>       |                               |  |  |  |                               |

## National FFA Agriscience Fair Score Sheet

Student(s) : \_\_\_\_\_ State: \_\_\_\_\_

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

\_\_\_\_\_ 15 pts. Knowledge Gained - Is there evidence that the student has acquired scientific skills and/or knowledge by doing this project? Does the exhibitor recognize the scope and limitation of the problem he/she has selected?

\_\_\_\_\_ 15 pts. Scientific Approach - Has the problem been clearly stated? Has the exhibitor solved the problem by using scientific facts as a basis for new conclusions? Is the exhibitor aware of the basic scientific principles that lend support to the methods used and the conclusions reached?

\_\_\_\_\_ 15 pts. Experimental Research - Has data been gathered from work done by the student, rather than the results from the work of others? Is the exhibitor's equipment effective? Does it do what it was intended to do? Can the research be the basis for further experimentation? Is the project actually a model or demonstration? Have variables been clearly identified and controlled for in the research process?

\_\_\_\_\_ 15 pts. Individual/Team Work - Has material been gathered and cited using an appropriate format? Is the logbook present for examination? Does the log book contain detailed information about the research process? If this was a team project, is there evidence of collaboration present? Identify the portions of the presentation representing the work of others.

\_\_\_\_\_ 15 pts. Thoroughness - Is the exhibitor aware of the empirical method (the necessity of repeating trials) and the importance of controlling the variables in the experimentation in order to reach valid conclusions? Has the analysis of the problem been orderly? Have procedures been outlined in a step-by-step fashion? How successfully was the original plan carried through to completion?

\_\_\_\_\_ 15 pts. Information - Are known facts and principles stated correctly and used accurately? Have the results of experiments been reported accurately even though faulty experimental methods or conditions may have made the data unreliable? If so, have these errors been noted?

\_\_\_\_\_ 15 pts. Results/Conclusions - Has the exhibitor started with known facts and drawn their own conclusions? Are the conclusions consistent with the data and/or observations? Is information provided as to what was learned as a result of research?

\_\_\_\_\_ 15 pts. Interview - Is the exhibitor able to communicate their knowledge of the project?

\_\_\_\_\_ 15 pts. Visual Display - Has the data been presented in the best manner for the particular type of information involved? Are spelling errors present? Does the exhibit demonstrate a general neatness and attractiveness? Is the display presented in a logical and interesting manner?

\_\_\_\_\_ 45 pts. Written Project Report – (Scored during prescreening process) Are all components of the written report available? Has the exhibitor made thorough use of the data, literature cited, interviews, correspondence, etc. and noted them properly? Considering the age and experience of the exhibitor, does the project make use of their abilities?

\_\_\_\_\_ /180 TOTAL SCORE