

Year: 20 \_\_\_\_\_

*The* **OHIO ACADEMY of SCIENCE**  
**Science Day Judging Card – META-ANALYSES**

**TEAM**

Event: \_\_\_\_\_

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|  |                                 |                      |      |
|--|---------------------------------|----------------------|------|
| <b>JUDGES:</b> Please indicate your evaluation of each subsection by placing a checkmark in the appropriate box.<br>(max. 10 points each section)  |                                 |                      |      |
| <b>SECTION #1: ORAL, WRITTEN, AND VISUAL COMMUNICATION:</b><br><b>Tell me about your project? May I see your report?</b><br><i>Judges are encouraged to consider student abilities (or potential disabilities) in all three types of communication when assigning points</i>   | Superior<br>(Exceeds)           | Excellent<br>(Meets) | Good |
| <u>Written:</u> Well documented lab journal (background and research notes, source data and graphs) AND Research Report (includes relevant background, research question and hypothesis showing how it is related to background, discussion of experimental design and procedures used by source researchers, data analysis and interpretation, conclusion and bibliography citing journals, textbooks, etc.). <b>Both journal and report are present.</b> |                                 |                      |      |
| <u>Oral:</u> Correct and concise explanation of project, design, and analysis. Responses reflect correct understanding of the analytic results as well as limitations of, expansions of, and/or impact of project.   |                                 |                      |      |
| <u>Visual:</u> Logical organization of material, neatly displayed, graphics and legends appropriate to project, easy to read and understand. Photos and graphics cited. Includes required information.   |                                 |                      |      |
| <b>Comments /Feedback(Required):</b>   | <b>Points Earned: _____ /10</b> |                      |      |
| SUPERIOR      9-10<br>EXCELLENT    6-7-8<br>GOOD            4-5<br>SATISFACTORY 0-3  |                                 |                      |      |
| <b>SECTION #2: ORIGINALITY: <i>Where did you get the idea for your project, experiment design, and analysis? What interests you about this topic? Did you modify any designs that you found and if so, how?</i></b>  | Superior<br>(Exceeds)           | Excellent<br>(Meets) | Good |
| Project displays originality in concept relative to grade level (i.e. not "cookbook", not classroom lab, not a simple extension of "found" idea) New idea, concept, principle, insight or non-obvious approach; Novel association or relationship of previous knowledge, particularly rigorous and exhaustive analyses that reveals previously unknown relations, etc.   |                                 |                      |      |
| Evidence of student's unique understanding and development of the project  |                                 |                      |      |
| <b>Comments /Feedback(Required):</b>   | <b>Points Earned: _____ /10</b> |                      |      |
| SUPERIOR      9-10<br>EXCELLENT    6-7-8<br>GOOD            4-5<br>SATISFACTORY 0-3  |                                 |                      |      |

|  |  |                      |      |
|--|--|----------------------|------|
| <b>SECTION #3: ANALYTIC DESIGN: <i>What question are you trying to answer and how did you decide to go about answering it? What did you learn from the data?</i></b> | Superior<br>(Exceeds)  | Excellent<br>(Meets) | Good |
| Project addresses a clear, focused problem or question with hypothesis that is testable using data from multiple peer-reviewed research papers.                      |  |                      |      |
| Well-designed plan and data collection methodology which identifies variables and controls used by source researchers. (Not a summary of known science)              |  |                      |      |
| Sufficient amount of scientific data is synthesized to address question/problem. Data used were collected using appropriate scientific protocols.                    |  |                      |      |
| Data properly combined and analyzed. Statistical analysis was in-depth and used correctly (age appropriate) Graphs and/or tables illustrate the data correctly.      |  |                      |      |
| Valid conclusions are reached from the data obtained. Age appropriate discussion of results. Sources of error identified.  |  |                      |      |
| <b>Comments/Feedback (Required):</b>   | <b>Points Earned: _____ /10</b>                                  |                      |      |
|  | SUPERIOR 9-10<br>EXCELLENT 6-7-8<br>GOOD 4-5<br>SATISFACTORY 0-3 |                      |      |
| <b>SECTION #4: DEPTH OF UNDERSTANDING: <i>What did you learn about the science behind your project before and during the analysis?</i></b>                           | Superior<br>(Exceeds)  | Excellent<br>(Meets) | Good |
| Adequate age appropriate background research (journals, textbooks, websites, etc.) relevant to the project which provides basis for hypothesis.                      |  |                      |      |
| Supplements answers with relevant information reflecting knowledge gained during the project.  |  |                      |      |
| Age appropriate use of terms and principles.   |  |                      |      |
| Age appropriate exploration of science in subject, depth of investigation, sophistication of project.  |  |                      |      |
| <b>Comments/Feedback (Required):</b>   | <b>Points Earned: _____ /10</b>                                  |                      |      |
|  | SUPERIOR 9-10<br>EXCELLENT 6-7-8<br>GOOD 4-5<br>SATISFACTORY 0-3 |                      |      |
| <b>SECTION #5: TEAMWORK: <i>How did your group function as a team? How was a team effort used to complete this project?</i></b>                                      | Superior<br>(Exceeds)  | Excellent<br>(Meets) | Good |
| All members of the team show an understanding and active participation in the entire project.  |  |                      |      |
| All members of the team participate equally in the presentation of project; correctly and clearly answering questions.   |  |                      |      |
| The necessity of the individual expertise contributed by each team member is clear.  |  |                      |      |
| <b>Comments/Feedback (Required):</b>   | <b>Points Earned: _____ /10</b>                                  |                      |      |
|  | SUPERIOR 9-10<br>EXCELLENT 6-7-8<br>GOOD 4-5<br>SATISFACTORY 0-3 |                      |      |
| <b>Total Points Earned (completed by judges)</b>   | <b>Overall Rank (CIRCLE)</b>                                     |                      |      |
| Section 1: _____ / 10  | Section 4: _____ / 10  | Superior (45-50)     |      |
| Section 2: _____ / 10  | Section 5: _____ / 10  | Excellent (30-44)    |      |
| Section 3: _____ / 10  | <b>Total: _____ / 50</b>   | Good (15-30)         |      |
|  |  | *Satisfactory (0-14) |      |

\*Satisfactory rank is not used at State Science Day. Use is optional at Local and District Science Days at the discretion of event administrators.

JUDGE'S Printed Name \_\_\_\_\_ Signature \_\_\_\_\_