

Science Investigation Rubric

Hawks Rise Elementary STEAM Fair

| Standard | Beginning | Developing | Accomplished | Exemplary | Score |
|---|---|---|--|---|-------|
| | 0-1 Point | 2 Points | 3-4 Points | 5 points | |
| Testable Question and Hypothesis | Missing, not testable, or unable to measure; hypothesis or question is off topic. | Question is not mentioned in hypothesis. | Question and hypothesis are both present and hypothesis is supported with reason(s). | Question includes both manipulated (changed) and controlled variables; hypothesis includes reason that is research-based and can be explained. | |
| Variables | Missing, unclear, or not understood. | More than one manipulated (changed) variable; does not include manipulated (changed) and controlled variables; variables not used correctly; variables not clear or understood. | Investigation includes some variables; variables are used correctly. | Experiment includes identified manipulated (changed) and controlled variables. | |
| Materials, Procedures/ Methods | Missing; Step by step procedures are not included. | Materials list is missing 3 or more items; step by step instructions are vague. | Materials list is missing 1-2 items; step by step instructions are included. | Materials list is complete and includes a list of tools for gathering data. Step by step instructions are included and are clear enough for others to repeat the investigation. | |
| Data/Trials | Missing or not clear. | Data shows only 1 trial. | Data shows some trials, but no visual representation. | Project uses an appropriate number of trials, that are recorded, with average recorded; data presented in an appropriate graph that can be read easily. | |
| Conclusion with Evidence | Missing | Conclusion presented with no reference to hypothesis. | Conclusion presented with hypothesis (supported or not supported) and evidence. | The conclusion includes claims, evidence, and reasoning, with a real world application. | |
| Reflection | Missing | Shows vague evidence of analysis and evaluation. | Shows some evidence of analysis and evaluation. | Complete with evaluation of the investigations on what was successful and what a scientist would do differently next time. | |
| Visual Presentation | Missing; illegible; messy; too incomplete to understand. | Some categories missing; unorganized (process does not flow). | All categories represented; well organized; correctly communicated intent; on stand alone backboard. | Project is visually appealing and neatly presented (written or typed); project is on backboard that stands by itself; grammar/spelling are appropriate for age. | |
| Total (out of 35) | | | | | |