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| --- | --- | --- |
| Category | Points Possible | Points Awarded |
| **Presentation: Oral and Poster** | **TOTAL: 25** |  |
| **Introduction**: summarize topic using applied content and prior research (what is already known), introduce experiment background and design making connections to “real-world” problems (what is the purpose) | 15 |  |
| **Questions:** precisely and accurately answered demonstrating scientific literacy and topic understanding | 5 |  |
| **Preparation:** Poster display is neat, organized and effectively maximizes use of available space (ie. manipulatives, video, etc.); oral presentation ia confident, prepared, and covers all content with little to no dependency on notes | 5 |  |
| **Scientific Thought** | **TOTAL: 50** |  |
| **Experimental Scope:** includes hypothesis, IV, DV, control group, controlled variables, materials, and procedure as applicable**;** is well-defined, and connects to “real-world” problems or situations | 5 |  |
| **Methods:** resourceful material use, design facilitates replication, error is minimized, includes multiple high-quality trials | 5 |  |
| **Data representation**: includes *variety* of numerical, statistical, and graphical data appropriately presented | 10 |  |
| **Data Analysis/Discussion**: data supports conclusion(s), is well-articulated, direct references to specific tables and graphs is present | 10 |  |
| **Conclusion:** Summarizes what is learned making connections to “real-world” problem/issue; acknowledges limitations in experimental investigation and addresses validity; highlights additional questions resulting from investigation | 10 |  |
| **External Research:** properly integrated and cited | 10 |  |
| **Creativity** | **TOTAL: 25** |  |
| **Problem Selection**: demonstrates *critical thinking* and consideration of the *relevance* of results | 10 |  |
| **Project Plan and Use of Equipment**: resourceful, minimizes error, recognizes theoretical and practical limitations, creative use of available materials, limits of equipment are understood | 5 |  |
| **Data Use:** sophisticated data manipulation and interpretation | 10 |  |

**Avon Science Fair 2014 Official Rubric (High School 9-12)**

Entrant Name(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Judge Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Total Points Awarded:\_\_\_\_\_\_/100**

**ADDITIONAL COMMENTS:**