|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Pasco County Elementary STEM Fair Rubric** | **3** | **2** | **1** | **0** |
| **Creative Ability/Originality** |  |  |  |  |
| **1** | There was an original question asked or problem trying to solve is not common knowledge |  |  |  |  |
| **2** | The student identified a variety of sources to guide their research |  |  |  |  |
| **3** | The procedure was created by the student |  |  |  |  |
| **4** | The student utilized the scientific method and/or engineering design process in experimentation rather than only descriptions and observations |  |  |  |  |
| **Scientific Thought** |  |  |  |  |
| **1** | The scope of the study was within the student’s ability |  |  |  |  |
| **2** | Extensive testing or experimentation was used throughout the investigation |  |  |  |  |
| **3** | Scientific research was conducted (analyzing text, interviewing experts, etc.) |  |  |  |  |
| **4** | The data collected relates to the thinking around the hypotheses |  |  |  |  |
| **5** | The student can explain why data supported, or failed to support, their hypotheses |  |  |  |  |
| **Thoroughness** |  |  |  |  |
| **1** | The student identified the control group for their hypothesis |  |  |  |  |
| **2** | The procedure was detailed, and could be easily replicated |  |  |  |  |
| **3** | Both the dependent and independent variable were defined |  |  |  |  |
| **4** | A minimum of 5 trials were conducted for each hypothesis |  |  |  |  |
| **5** | The abstract includes purpose, procedure, data, and conclusions |  |  |  |  |
| **Skills** |  |  |  |  |
| **1** | Data measurements were done precisely |  |  |  |  |
| **2** | Safety protocols were appropriate, and can be explained by the student |  |  |  |  |
| **3** | Technical problems were overcome and not merely avoided |  |  |  |  |
| **4** | The Research Plan was thoroughly completed and a log may be needed to more effectively communicate, procedures, data, conclusions and thinking. |  |  |  |  |
| **5** | This project exhibits the students work and excessive help was not utilized |  |  |  |  |
| **Communication** |  |  |  |  |
| **1** | The student is able to explain what was done |  |  |  |  |
| **2** | The student can defend the connection between their results and conclusions |  |  |  |  |
| **3** | The student can explain where the research can lead in the future |  |  |  |  |
| **4** | The student can relate their research to the real world |  |  |  |  |
| **5** | The student anticipated problems and is able to identify potential sources of error  |  |  |  |  |
| **Initial Total (Out of 72)** |  |  |  |  |
| **Additional STEM Bonuses** |  |  |  |  |
| **S** | The project has the potential to dramatically impact a field of science |  |  |  |  |
| **T** | The student utilized technology in the design, implementation or analysis of the project |  |  |  |  |
| **E** | A new methodology, formula or tool was created to conduct the investigation. |  |  |  |  |
| **M** | Mathematical approaches were used to help guide the development of the investigation or analysis of data. |  |  |  |  |
| **STEM Total (Out of 12)** |  |
| **Grand Total (Out of 84)** |  |

**Project Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Judge \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ High - - - - - - - - Low**

**Recommended Place:** 1st 2nd 3rd 4th **Recommend for State:** Yes No With Reservations