Badger State Science and Engineering Fair Judging Form

| Project Title: |  |  |  | Judge |
| :---: | :---: | :---: | :---: | :---: |
| Creative I Original | 2524232221201918 Unique problem-solving methods \& data analysis. Ingenious use of materials \& equipment. Truly hisher own. | 1716151413121110 <br> Some advanced problem-solving \& data analysis. Modified an existing experiment. Made it his/her own. | Basic problem-solving \& data analysis. <br> Used an existing experiment. | $\begin{aligned} & \text { Score } \\ & \text { (0-25 pts.) } \end{aligned}$ |
| Comments: |  |  |  |  |
| Scientific Though | 30292827262524232221 <br> Extensive review of literature. <br> Problem stated clearly; all variables identified. <br> Well-developed hypothesis/plan. <br> Detailed, accurate observations <br> Data collection explained. <br> Conclusions limited to the data <br> Possible next steps described | 20191817161514131211 <br> Adequate review of literature. <br> Problem stated clearly; critical variables <br> identified. <br> Developed hypothesis/plan. <br> Accurate observations. <br> Appropriate data analysis employed and explained. <br> Conclusions flow from the data. | Minimal review of literature <br> Problem vague; some variables identified <br> Obvious or weak hypothesis/plan. <br> Sketchy observations. <br> Limited data analysis. <br> Conclusion stated but not fully following the <br> data. | Score <br> (0-30 pts.) |
| Comments: |  |  |  |  |
| Thoroughness | 1514131211 <br> Well-organized, detailed logbook with dated entries. <br> Detailed scientific/engineering process completed. <br> Multiple trials for data collection. <br> Advanced awareness of background knowledge. | 109876 <br> Organized logbook with dated entries. Complete scientific/engineering process. Multiple trials for data collection Adequate awareness of background knowledge. | 543210 <br> Minimal logbook with sporadic entries Project appears to be rushed through. Scientific process seems incomplete. Single trial for data collection. Minimally aware of background knowledge | $\begin{aligned} & \text { Score } \\ & \text { (0-15 pts.) } \end{aligned}$ |
| Comments: |  |  |  |  |
| Skill | 1514131211 <br> Well thought-out design; attention paid to details, <br> Precise lab techniques. <br> Accurate measurements and computations. <br> Understands complexity of the equipment. | 109876 <br> Experimental design evident. <br> Reasonable lab techniques. <br> Good measurements and computations. <br> Appropriate use of equipment. | 543210 <br> Limited evidence of planning the experiment. Mostly acceptable lab techniques. Sloppy measurements and/or computations. Lacks understanding of the equipment used. | Skill <br> Score <br> (0-15 pts.) |
| Comments: |  |  |  |  |
| Presentation VISUAL | 765 <br> .Data collection, analysis and conclusions presented clearly using graphs, charts, diagrams, models, and similar aids. <br> Display board presentation is precise; color and format enhances understanding. Display board is creative and /or unique | 432 <br> Clear presentation of some portions of the project using basic graphs, charts, diagrams, models, and similar aids. <br> Display board has a major component missing. | 10 <br> Minimal use of graphic devices to illustrate the concepts or the analysis of the project. <br> Display board presentation seems random and/or sloppy | $\begin{aligned} & \text { Score } \\ & \text { (0-7pts.) } \end{aligned}$ |
| Comments |  |  |  |  |
| Presentation ORAL | 876 <br> Concise, well-organized project description Students share the presentation and each group member is well prepared Students make eye contact, use inflection and appropriate hand gestures Students are enthusiastic about the project Students answer judges' questions thoroughly It is clear the students have prepared | 543 <br> Understandable project description. <br> One or two students take over and/or some students do not participate <br> Students are somewhat unenthusiastic. <br> Students can answer some, but not all of the <br> judges questions confidently <br> Eye contact/ hand gestures are is lacking <br> There has been some preparation | 210 <br> Basic project information presented. Students are hard to hear, do not make eye contact and are not enthusiastic Students are unable to answer the judge's questions It is clear that the students have not practiced.. | $\begin{aligned} & \hline \text { Score } \\ & \text { (0-8pts.) } \end{aligned}$ |
|  |  |  |  | Total (0-100 pts.) |

