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| **Guidelines** | **Max Score** | **Score** |
| Creative Ability:  • Research is student-­‐initiated and original (0-­‐5)  • Problem solving approach is creative (0-­‐5)  • Equipment is creatively used and/or modified (0-­‐5)  • Interpretation of data shows creative and original thinking (0-­‐5)  • Understanding of project implications (0-­‐5) | 25 points |  |
| **Scientific Thought:**  • Clear and unambiguous understanding of problem(0-­‐4)  • Clearly designed project plan for determining a solution (0-­‐4)  • Variables clearly recognized and defined; controls used correctly (0-­‐4)  • Data adequately supports conclusions; limitations recognized (0-­‐4)  • Scientific literature cited; not just popular literature (0-­‐4)  **OR**  **Engineering Goals:**  • Clear objective (0--‐4)  • Objective relevant to potential user’s needs (0--‐4)  • Solution is workable and economically feasible (0--‐4)  • Solution could be used in design or construction of end product (0--‐4)  • Solution is a significant improvement over current alternatives (0--‐4) | 20 |  |
| **Thoroughness:**  • Original research question was completely addressed (0--‐4)  • Conclusions are based on replication(0--‐4)  • Project notes/lab notebook complete (0--‐4)  • Student is aware of alternate approaches or theories (0--‐4)  • Student spent appropriate amount of time on project (0--‐4) | 20 |  |
| **Skill:**  • Data was obtained and analyzed appropriately (0--‐5)  • Student worked largely independently (0--‐5)  • Student has required skills and understanding to continue research independently (0--‐5) | 15 |  |
| **Clarity:**  • Clear discussion of project in paper (0--‐4)  • Written material/poster reflects understanding (0--‐4)  • Data and results presented clearly (0--‐4)  • Presentation is forthright (0--‐4)  • Student designed and created poster largely independently (0--‐4) | 20 |  |
| Total Points | 100 |  |