**STEM PROBLEM SOLVING**

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| **Learning Outcome: Problem Solving** | |
| **Assignment: DESCRIBE** | |
| **Developmental Level: [ ] Introduction [ ] Reinforcement [ ] Mastery** | |
| **Performance Level** | **Description** |
| **Exemplary** | The student fulfills all of the following six criteria.  **Scientific Method:**  1) Develops a research question.  2) Follows the scientific method starting with hypothesis testing, researching prior studies, developing a method, analyzing data, presenting results, and recommending changes.  **Analysis:**  3) Demonstrates understanding of data analysis.  4) Chooses correct analysis for research question.  **Logic:**  5) Provides documentation of results.  6) Makes informed decision based on scientific evidence. |
| **Proficient** | The student fulfills four or five of the following six criteria.  **Scientific Method:**  1) Develops a research question.  2) Follows the scientific method starting with hypothesis testing, researching prior studies, developing a method, analyzing data, presenting results, and recommending changes.  **Analysis:**  3) Demonstrates understanding of data analysis.  4) Chooses correct analysis for research question.  **Logic:**  5) Provides documentation of results.  6) Makes informed decision based on scientific evidence. |
| **Competent** | The student fulfills three of the following criteria.  **Scientific Method:**  1) Develops a research question.  2) Follows the scientific method starting with hypothesis testing, researching prior studies, developing a method, analyzing data, presenting results, and recommending changes.  **Analysis:**  3) Demonstrates understanding of data analysis.  4) Chooses correct analysis for research question.  **Logic:**  5) Provides documentation of results.  6) Makes informed decision based on scientific evidence. |
| **Needs Improvement** | The student fulfills one or two of the following criteria.  **Scientific Method:**  1) Develops a research question.  2) Follows the scientific method starting with hypothesis testing, researching prior studies, developing a method, analyzing data, presenting results, and recommending changes.  **Analysis:**  3) Demonstrates understanding of data analysis.  4) Chooses correct analysis for research question.  **Logic:**  5) Provides documentation of results.  6) Makes informed decision based on scientific evidence. |
| **Inadequate** | None of the criteria is addressed by the student. |