**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. |