**Objective 1: Students will summarize at least two laws, theories, or concepts fundamental to the discipline under study.**

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| 4 - Exemplary (Master of the craft) | 3 - Proficient (Emerging scholar) | 2 - Developing (Educated layperson) | 1 - Novice/Beginner |
| The student accomplishes both additional tasks under the previous level. | The student completes all the tasks in the previous level and either   * shows how the law, principle or concept can be applied to a specific case or generalized to a broader range of phenomena, or * notes the problematic areas or the limitations of the theory or concept | The student correctly states the law, theory or concept being described using appropriate terminology.  The student identifies the phenomena or general situation to which the law, theory, or concept can be applied.  The student cites two lines of evidence supporting the law, theory, or concept | The student states the law, theory or concept being described in a superficial manner. |

**Objective 2: Students will apply fundamental concepts of the science being studied to explain a natural phenomenon. (Given an observation, explain it.)**

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| 4 - Exemplary (Master of the craft) | 3 -3Proficient (Emerging scholar) | 2 - Developing (Educated layperson) | 1 - Novice/Beginner |
| The student accomplishes both additional items listed under the previous level | The student accomplishes all of the tasks under Level 1, and either   * Identifies the reasons for variation in the data set, or * Notes problematic areas or limitations in the explanation of the phenomenon | The student correctly identifies which principles are appropriate for the explanation. (Or is it acceptable to have the question specify this?)  The student identifies the aspects of the phenomenon that can be explained by the principle or theory.  The student correctly identifies the causal connections that allow the data to be explained by the concepts. | The student states the a concept that could be explanatory, but shows no ability to connect the dat. or phenomenon to the concept. |