**Using Science and Engineering Practices for Sense Making Tasks - Template**

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| **Grade Level** | **Standards** | | **Authors** |
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| **Description of Phenomenon*. Include links if necessary.*** | | | |
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| **Choose/Highlight any applicable SEP’s used with this phenomenon for sense-making** | | | |
| * **Asking Questions & Defining Problems** * **Developing and Using Models** * **Planning and Carrying Out Investigations** * **Analyzing and Interpreting Data** | | * **Using Mathematics and Computational Thinking** * **Constructing Explanations & Designing Solutions** * **Engaging in Argument from Evidence** * **Obtaining, Evaluating, and Communicating Information** | |
| **Teacher procedures to engage students with the Science and Engineering Practices.** | | | |
| Materials/Resources:  Preparation:  Instructional Procedures: | | | |
| **Questions, sentence stems, and/or SEP Protocols to engage students in Sense Making.** | | | |
| (AST pages for reference: Ch. 6-12)  (PD Session SEP Resources and Protocols: <https://bit.ly/SEPs23>) | | | |
| *Example Questions and Sentence Stems:*   1. Can you identify any patterns or trends in the data? 2. What further investigations could help clarify your findings? 3. Can you explain the relationship between variables based on the evidence? 4. How might you connect this experiment to real-world scenarios? 5. What do you predict will happen next based on the current data? 6. How would you modify the experiment to test a different variable? 7. The relationship between the variables can be explained by… 8. To improve the experiment, I would consider changing… 9. When comparing the results to my initial predictions, I observed… | | | |