

***Defined STEM: Working Through a Performance Task
Student Work Flow***

1. Read, View and Analyze the problem scenario.

NGSS SP 1

- Review the *Video* resources
- Review *Goal, Role, Audience, Situation*
- Discuss within your group what is important and why
- Take notes on group discussion identifying thoughts and ideas
- Complete *Informational Language Task/Constructed Response* (*This can be done prior to video and performance task introduction or after*)

Teacher Checkpoint: Check for understanding of what is known, information gained from the Informational Language Task/Constructed Response, and the problem statement.

2. (Inquiry) Developing questions for research.

NGSS SP 3

- Prepare a list of questions you think need to be answered to solve the problem.
 - Some may be about the goal
 - Some may be about the audience
 - Some may be about the situation
 - Some may be about the products

3. (Research & Collaboration) Planning, Investigating, and Analyzing.

NGSS SP 3, 8

- List actions to be taken to answer questions: e.g., question an expert, get on-line data and/or information, visit library, conduct experiments, etc.
- Conduct research
- Share research and answers to questions with the group
- Based on your analysis of the research, list recommendations, solutions, and/or decide best way to move forward.

Teacher Checkpoint: Once you have completed your research, review your group's findings with the teacher before moving forward to constructing the solution/product.

6. (Collaboration) Construct Solutions/Products.

NGSS SP 4, 6, 7

- Completing the *Argumentative Language Task (Optional)* at this point will require students to look at the task from multiple lenses.
- Prepare a product(s) in which you provide solutions, make recommendations, predictions, inferences, or other appropriate needs based upon the products you are creating.
- Consider multiple products and their purpose for the audience

7. (Presentation and Reflection) Present findings.

NGSS SP 6, 7, 8

- Present your product(s) and/or presentation to the audience.
- Be prepared to support your decisions and the products you have developed with evidence to justify and support your findings and beliefs.
- Reflect on products based upon self, audience and/or teacher feedback

Teacher Checkpoint and Product Rubrics: Check for understanding through products produced and alignment with product rubrics. Students should reflect on the purpose and focus for development of the products. Were the requirements met and was the problem statement addressed?