

PURPOSE

- Asking Questions and Defining Problems
- Make sense of problems and persevere in solving them
- Why are you doing the experiment?
- What did you observe in the world that made you ask your question?
- What made you curious?

QUESTION/PROBLEM

- Asking Questions and Defining Problems
- Make sense of problems and persevere in solving them
- Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation
- What are you trying to figure out?
- What problem are you trying to solve?

HYPOTHESIS

- Developing and Using Models
 - Constructing Explanations and Designing Solutions
 - Construct viable arguments and critique the reasoning of others
 - Write arguments to support claims using valid reasoning
- What do you think a likely answer or solution to your question/ problem could be? Why?

RESEARCH & BACKGROUND

- Obtaining, Evaluating and Communicating Information
- Attend to precision
- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words
- Gather relevant information from multiple print and digital source, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism
- Draw evidence from informational texts to support analysis, reflection, and research
- What have others said about the topic of your inquiry?
- How does this research influence how you will approach your project?
- Have others done this experiment before?
- How will your project further the research and experimentation that has already been done?

Project Title

A good title attracts attention, but also gives information about the project.

ABSTRACT

Provide a concise paragraph summary of your project including: purpose, hypothesis, procedures used, data summary or analysis, and conclusions.

MATERIALS

Record everything you use for your project. You do not include the materials for the board.

PROCEDURE

Record the steps you did during your experiment. Make sure others can follow them.

DATA

Visually communicate your data in the format that matches the type of data you collected. You can show both raw and interpreted data. For example: spreadsheets, photos, diagrams, charts, maps, graphs, models, etc.

- Planning and Carrying Out Investigations
- Developing and Using Models
- Using Mathematics and Computational Thinking
- Make sense of problems and persevere in solving them
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Integrate and evaluate content presented in diverse media and formats, including visually and quantitative, as well as in words



Write down everything you do from start to finish for your project. Do not include preparing the board. Journal should be hand written and authentic. Be sure to have your journal on display with your board.

RESULTS

- Analyzing and Interpreting Data
- Obtaining, Evaluating and Communicating Information
- Reason abstractly and quantitatively
- Attend to precision
- Look for and make use of structure
- Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective analysis of content

This is a summary of results from the experiment. Explain your Data, Photos, Charts, Graphs and models in paragraph form.

CONCLUSION

- Engaging in Argument from Evidence
- Obtaining, Evaluating and Communicating Information
- Construct viable arguments and critique the reasoning of others
- Draw evidence from informational text (including student data) to support analysis, reflection, and research
- Write arguments to support claims using an analysis (of all components of process and research) using valid reasoning and valid and sufficient evidence

Restate question
Describe your observations: before, during & after the experiment
Summarize your research
Describe your experiment
Explain and justify your conclusion with your data and observations.

NEXT STEPS

- Obtaining, Evaluating and Communicating Information
- Asking Questions and Defining Problems
- Make sense of problems and persevere in solving them
- Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation
- What new questions do you have as a result of your inquiry?