1. **Problem**
   What do you wonder about?

   State the question(s) the experiment is trying to solve.

2. **Background Research**
   What do you already know?

   Gather information about the problem before the experiment.

3. **Hypothesis**
   What do you predict will happen?

   • Predict what will happen in the experiment.
   • Identify variables and controls.
4. Experiment

- What supplies do you need?
- What steps will you take?

- Materials—List supplies and equipment used to conduct experiment.
- Procedure—Describe the step-by-step process on how the experiment was performed.

5. Results

What happened in your experiment?

- Record and graph quantitative data.
- Report qualitative observations.

6. Conclusion

- What did you learn about your prediction?
- What new questions do you have?

- Summarize results.
- State if hypothesis was supported or not.
- Suggest improvements to the experiment.

PSD Essential Standards for Science
1.1 Predictions and Hypotheses: Students ask questions and state predictions (hypotheses).
1.2 Collecting Data: Students select and use simple devices to gather data.
1.3 Using Data: Students use data based on observations to construct a reasonable explanation.
1.4 Scientific Investigation: Students communicate about investigations and explanations.