



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.

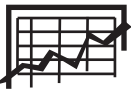
Scientific Method (continued)



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.