

Scientific Investigations

Scientific Method

Grades 3-5

Investigation Research

Why? Build student knowledge base

When? Before deciding on a topic, before forming a hypothesis, to develop a procedure, or to analyze the results.

☀ Investigation Title

☀ Investigation Question/Purpose

☀ Pre-Investigation-Discovery/Safety



Look at ways to explore using appropriate scientific tools and/or everyday materials; Practice safety; Read about science; Review similar classroom investigations; Discover and use relevant science vocabulary; Use interactive technology related to the potential investigation

*This step could be done here or any time before the Procedure and repeated, if necessary.

☀ The Prediction/Hypothesis

"If . . . then . . ." Write your predictions based on prior knowledge, experiences, and research; If Pre-investigation or Research is done after the first writing, the Hypothesis can be rewritten based on new information learned.

☀ Materials

List of investigation materials



☀ The Procedure

Numbered, step-by-step directions for the investigation steps;
List the dependent and independent variables in the investigation

☀ The Results

Include a journal, pictures, notes, charts/tables of the investigation results



☀ The Conclusion

Write a statement discussing the hypothesis; Describe what happened in the investigation, analyze why it happened based on new knowledge gained from investigation research, and include relevant science vocabulary; Connect the results to everyday events; Describe future related investigations