

## Writing A Science Research Proposal

**Objective:** The objective of science research is to answer a question by gathering and analyzing data. The research includes the use of reference materials for background information, archives for data, trends, and primary source accounts, and investigation to collect data.

### What should be in your proposal?

#### Research Question

Use a question to state what you are investigating.

Example: Does rain water pH correlate with sulfur dioxide concentrations in the air?

#### Hypothesis

State what you expect to find based on your background and archive research.

Example: The pH of rain will vary directly with changes in sulfur dioxide levels in the air.

#### Materials

List what you will need to conduct your research project.

Example:

Rain gauge

pH paper or indicator

Internet sulfur dioxide data

#### Procedure

Describe how you will conduct your data collection.

Example:

1. Collect rainwater.
2. Measure the pH.
3. Compare the rainwater pH to sulfur dioxide data.
4. Repeat over several weeks.

#### Data Analysis

Describe the type of data you will collect and how you plan to analyze it.

Example: Rainwater pH will be measured and recorded in an Excel spreadsheet along with sulfur dioxide data from the Internet. The rainwater pH and sulfur dioxide data will be displayed as a graph for comparison. If the pH is more acidic when sulfur dioxide levels increase and less acidic when sulfur dioxide levels decrease, then the hypothesis will have been correct.