

The Scientific Method

Question/ Problem

- Think of a scientific question you would like to answer or problem you would like to solve.

Hypothesis

- What do you think the answer or solution might be?
- Your "guess" should be based on research and prior knowledge so do some research BEFORE you develop a hypothesis.
- Use "If...Then...Because" Format.

Plan an Experiment

- How will you find out if your hypothesis is correct?
- Develop procedures and carry out an experiment.
- List the materials you will need.
- Be sure to consider variables and controls.

Data/Results

- Report what happened during your experiment.
- Organize your data in charts, diagrams, and other easy to read formats.
- Account for variances.

Conclusion

- Draw conclusions based on your results.
- Why do you think things turned out the way they did?
- Was your hypothesis correct or incorrect? Why might this be? What scientific phenomena might be responsible for your results? What about human error?

Extension

- Think of ways to take your experiment a step further.
- What would you change if given the opportunity to perform the experiment again?
- What other related questions/problems can you address?

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