

Old Wives' Tale or Helpful Hint?

People often tell us things and ask us to believe they're true. Some of these "Helpful Hints" are true. Some aren't. People have realized for a long time that some of these hints aren't true and call them "Old Wives' Tales." An Old Wives' Tale is an everyday statement that some people believe is true, but it really isn't. But how can you tell them apart? You can't just ask a grownup, some of them are wrong. The only way anyone knows the truth for sure is to use the Scientific Method.

Each group will choose a hint/old wives' tale to test using the scientific method. Make sure you choose an old wives' tale or hint, not a superstition. A superstition involves luck, magic or the supernatural, a hint or old wives' tale does not. Each group will work together as a class to find out if this hint is true or false. Each group is responsible for preparing an individual written lab report. Your grade on this assignment will be based on your participation during the project in and out of class and your written and oral lab reports.

Homework to prepare for Day 1:

Explain to at least two adults the difference between a helpful hint, a superstition and an old wives' tale. Ask the adults to help you come up with as many examples as you can. You must write down and bring in at least 10 examples tomorrow.

Day 1 - Determine your PURPOSE

Each student should bring in at least ten old wives' tales or helpful hints to class. We'll list all the old wives' tales on the board. Your group should choose the one you plan to test on your project sheet. It must be a question that you can test quickly and SAFELY. Your teacher must check your PURPOSE before you continue.

Day 2 - RESEARCH:

We'll spend one day researching in the library. Summarize what you learned on your group's project sheet

Day 3 - HYPOTHESIS & EXPERIMENT

Use what you've learned to write a testable hypothesis. Design an experiment to test your hypothesis. Write the procedure you plan to use as well as a materials list. Make sure you control for any variables. Do not begin your test until your teacher has approved your research, hypothesis, material and procedure and signed your project sheet.

Days 4 & 5 - EXPERIMENT (Part 2)

Obtain all your materials and perform your experiment following the procedure outlined on your project sheet. Record your data and observations as you proceed.

DAY 6 - ANALYSIS

Use the computer software to analyze your data. Create appropriate charts or graphs to help you look for trends and evidence proving or disproving your hypothesis.

Day 7 - CONCLUSION & DISCUSSION

As a group you must decide whether your hypothesis was proven true or false, or if your tests were inconclusive. Write a 1-2 sentence statement of your conclusion. Each individual should write his/her own discussion (1-2 paragraphs) Finally, finish the lab report and turn it in. Prepare to present your findings to the class.

