

Scientific Method - standardized process for conducting sound scientific investigations

- (1) Observation - using the 5 senses to notice some phenomena
- (2) Hypothesis - testable explanation of the observation
- (3) Experiment - repeatable step by step process for testing the hypothesis

(A) independent variable - variable scientist controls/changes

(B) dependent variable - variable affected by changes to ind. variable

(C) controls - variables kept constant so they don't mess w/ your experiment



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- (4) Data - information gathered in an experiment
 - (A) qualitative - descriptions
 - (B) quantitative - measurements (#'s & units)
- (5) Analysis - mathematical calculations or reasoning about the data
- (6) Conclusion - summary of the experiment & the results
 - (A) theory - explain why the phenomena occurs
 - (B) scientific law - explains what the phenomena is