

Scientific Method

(1) Observation - using your senses to notice something

(2) Hypothesis - testable explanation of the observation

(3) Experiment - step by step, repeatable test of the hypothesis

(A) independent variable (IV) - property being tested, changed by the scientist

(B) dependent variable (DV) - property affected by changes to the IV.

(C) controls - properties kept constant so they don't interfere w/experiment.

(4) Data - information gathered during an experiment

(A) qualitative - description

(B) quantitative - numerical measurements

(5) Analysis - reasoning or mathematical calculations on the data

(6) Conclusion - summary of your results as they relate to your hypothesis.

(A) theory - explains why phenomena occurs

(B) law - explains what phenomena is occurring.