

Terms used in Describing the Nature of Science¹

Hypothesis: A tentative statement about the natural world leading to deductions that can be tested. If the deductions are verified, the hypothesis is provisionally corroborated. If the deductions are incorrect, the original hypothesis is false and must be abandoned or modified. Hypotheses can be used to build more complex inferences and explanations.

Theory: In science, a well-substantiated explanation of some aspect of the natural world that can incorporate facts, laws, inferences, and tested hypotheses. In science, theories do not turn into facts through the accumulation of evidence. Rather, theories are the end points of science. They are understandings that develop from extensive observation, experimentation, and creative reflection.

Law: A descriptive generalization about how some aspect of the natural world behaves under stated circumstances.

Fact: In science, an observation that has been repeatedly confirmed and for all practical purposes is accepted as “true.” Truth in science; however, is never final, and what is accepted as a fact today may be modified or even discarded tomorrow.

¹ Modified from *Teaching About Evolution and the Nature of Science* by the National Academy of Sciences (Washington, D.C.: National Academy Press, 1998)