

Science is a systematic attempt to understand natural phenomena in as much detail and depth as possible, and then to use the knowledge so gained to predict, modify and control the phenomena.

The scientific method involves the following steps:

- (i) Taking a large number of systematic observations through controlled experiments.
 - (ii) Studying these observations and looking for their logical behavior based on qualitative and quantitative reasoning.
 - (iii) Mathematical modeling, i.e., suggesting some model to account for the observed behavior.
 - (iv) Theoretical prediction of what is not actually observed on the basis of the suggested model.
 - (v) Verification or falsification of the model.
- Speculation and conjecturing also have a place in the scientific method but it must be verified by experiments.