

The Scientific Method:

Francis Bacon and Rene Descartes

Matching:

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| 1. Deductive Reasoning | A. method that scientists used to correctly arrive at new knowledge and to update previous knowledge. |
| 2. Francis Bacon | B. born in 1561, well known proponent of inductive reasoning and empiricism |
| 3. Inductive Reasoning | C. deduce theorems from first principles that are self evident, obvious, or directly observable.
(Goes from a general assumed truth to a specific and certain conclusion) |
| 4. Empiricism | D. the belief that sense experiences is the ultimate source of all of our concepts and knowledge |
| 5. The Scientific Method | E. makes broad generalizations from specific observations; conclusions are drawn from several observations. |

Fill-in-the-blank:

4 Stages of Inductive Reasoning:

1. _____: collecting data without biases
2. _____: Classifying facts and identifying the pattern of regularity.
3. _____: Making generalizations about the relations between the facts from the patterns.
4. _____: Testing the inference through further observations.