

The Scientific Method: Francis Bacon and Rene Descartes

Matching:

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.