Deductive and Inductive Reasoning

• Deductive reasoning is the reasoning process from one or more general statements (premises) to reach a logically certain conclusion.

• Inductive reasoning is the reasoning process from a set of specific observations to reach a general conclusion.

What characterizes science?

- The development of theories
- The desire to broaden human knowledge
- Use of the scientific method
 - helps simplify the complex
 - drives the development of theories
 - grounded in the real world

- Use of methods
 - carefully planned
 - replicable
 - evidence-based