INDUCTIVE REASONING IS USED IN SOCIAL SCIENCES:

1. Inductive Reasoning: A scientific method of knowledge focusing that scientific knowledge is generated by arriving at generalizations on the basis of pure observations using the principle of induction.

   Induction: Induction is a process for moving from particular statements to general statements. This logic is used in social sciences to produce theory from data. Two views stand out prominently as answer to the question regarding the aim and method of science. Francis Bacon began this method.

   Inductive framework = (1) Observation (2) Pattern (3) Tentative Hypothesis (4) Theory

DEDUCTIVE REASONING IS USED IN SCIENCES:

2. The second view is called Deductive reasoning or is the method of Hypothesis. Rene Dercartes is the Father of Hypothesis. Deduction is a process that is used to derive a particular statement from a theory or general statements. A hypothesis is first deduced from a theory. This is then tested through observations complied as empirical data. A conclusion is reached by reasoning on basis of the empirical data. Inference in which the conclusion flows from the first premise or hypothesis.

   Deductive framework = (1) Theory (2) Hypothesis (3) Observation (4) Confirmation or conclusion.

   Scientific Reasoning: To explain a phenomenon scientifically is to deduce its description from a set of laws, which are called "Covering Laws". These are a set of statements that describe the initial conditions. Reasoning is used to explain why those conditions exist.

   In sum, all explanation that are called 'scientific' must contain laws and involve deductive reasoning.