**data:** Information recorded from observation; may be in numerical or nonnumerical form.

**deductive logic:** Reasoning in which the conclusion necessarily follows if the evidence is true.

**empirical pattern:** A relationship among phenomena usually inferred from data.

**Hawthorne effect:** A change in behavior, such as an improvement in performance, that occurs when research participants know they are being studied.

**hypothesis:** An expected but unconfirmed relationship among two or more phenomena.

**inductive logic:** Reasoning in which the conclusion is implied by, but goes beyond, the evidence at hand and, hence, may or may not be true.

**serendipity pattern:** Unanticipated findings that cannot be interpreted meaningfully in terms of prevailing theories and, therefore, give rise to new theories.

**theory:** An interconnected set of propositions that shows how or why something occurs.