Science Key Definitions for the Desperate

Term	Definition
The Parsimony Principle	The parsimony principle is a heuristic that states that one should prefer the least complicated explanation for an observation when weighing hypotheses
Occam's Razor	When presented with competing hypothetical answers to a problem, one should choose the answer that makes the least assumptions
Induction	Reasoning that moves from multiples specific instances to a general rule
Observation (HDM)	Identify a Scientific Problem
Hypothesis (HDM)	Create a testable theory as a solution to the problem
Prediction (HDM)	Derive an observable consequence of the hypothesis
Experimentation (HDM)	Test the hypothesis for the consequence
Confirmation Holism	The problem in falsification that hypotheses cannot be tested in isolation; when a falsifying experiment occurs, one cannot know if the hypothesis is at fault or the assumed theories and hypothesis behind the failed prediction is at fault.
Falsifiability (HDM)	The HDM makes definite predictions that can be tested against experience
Paradigmatic	A description of Science, claims that the validity of scientific theories are based on the body of current widely-accepted scientific theories