Notes on Reasoning (Argument)

D R I Patterns
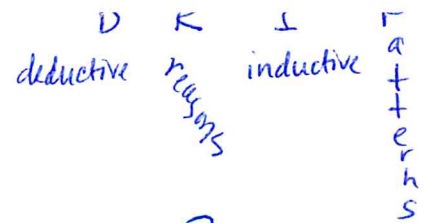deductive reasons inductive

Inductive Reasoning

Key words: predict
assume
observation
based on past events
(collected data)
pattern
inference
hypothesis
experiment

Definition:
The process of... making observations or detecting patterns to come to a generalization.

The generalization is called a:
Conjecture
EX) All tulips are red.

How do you prove an inductive argument to be false?
Counterexample
EX) A yellow tulip.

Deductive Reasoning

Key words: deduce (Sherlock Holmes)
facts
logic
definitions
premise
court argument
prove

Definition:
The process of... using facts and logic to arrive at a valid conclusion (accepted statement)

The accepted statement is called a: ~~theorem~~ premise (must be valid)

The logic is called a:
valid argument

Therefore: truth (theorem)