

Student Note Sheet / August 30th

Formal Logic

Formal Logic: Formal logic focuses on arguments in which the

_____ **premises** _____ imply a certain _____ **conclusion** _____.

Argument in Formal Logic

Premise 1: All birds have wings

Premise 2: A cardinal is a bird

Conclusion: Therefore a cardinal has wings.

In this type of argument the _____ **conclusion** _____ must be true as long as the

_____ **premises** _____ are true.

You can even make a nonsense argument structurally true in formal logic.

Premise 1: All birds have horns.

Premise 2: A poodle is a bird.

Conclusion: Therefore a poodle has horns.

Formal Logic is all about the _____ **form** _____. Therefore it can be valid in

_____ **form** _____ even if the premises are not sound, or _____ **valid** _____.

Deductive Reasoning

Deduce: to lead down or away

Deductive reasoning starts with _____ **premises** _____ that lead down to a necessary

_____ **conclusion** _____.

Deductive reasoning is used in formal logic. Deductive reasoning is
__ **whole** _____ to
_____ part reasoning.

In formal logic arguments are either **valid** or invalid.

Informal Logic

Informal logic deals with **ordinary** language arguments.

In informal logic the **form** is not important but the
weight
of the arguments

Informal Argument

The sun has risen every day for as long as anyone can remember
Therefore the sun will rise tomorrow.

Inductive Logic

Induce: **bring about or give rise to.**

Inductive reasoning starts with evidence that can be observed with the

senses and uses these observations to make
reasonably accurate

Judgements.

Inductive arguments are **part** to **whole** arguments. They are either
strong
or **weak**.

