

In the simplest sense, **logic** is the study of the principles of correct reasoning. If you take a logic course in college, you will likely have a professor or two who have much more complex definitions of logic. For our purposes, this simple definition will work just fine.

Our activity today will focus on logical fallacies. In the simplest sense, logical fallacies are mistakes in reasoning. Your first step is to study the definitions and examples below, and then come up with examples of your own. In a little while, you will be allowed to work with a partner.

Argument from Ignorance: (Ad Ignorantium)

Definition: A thing is true because it hasn't been proven to be untrue.

Example: Aliens exist because they haven't been proven to not exist.

Begging the Question

Definition: Assuming a conclusion in one's question

Example: Have you stopped beating your wife yet?

Post Hoc Ergo Propter Hoc

Definition: Because B follows A, A caused B.

Example: I got a bug bite two days ago and I have a fever today. The bug bite caused my fever.

Straw Man

Definition: attacking a distorted version of an opponent's argument

Example: "Senator Jones says that we should not fund the attack submarine program. I disagree entirely. I can't understand why he wants to leave us defenseless like that."

Ad Hominem

Definition: Attacking an opponent's character rather than his argument

Example: "You may say that Obama is a bad president, but you're a fat idiot."

Tautology

Definition: Circular reasoning; when the premise is restated in the conclusion

Examples: I'll get there when I get there. Say it over again once more.

Slippery Slope

Definition: When a person asserts that one event must follow from another event

Examples: We shouldn't get involved militarily. Once the government sends in some troops, they'll send in thousands.

False Dichotomy

Definition: This happens when an arguer claims that his conclusion is one of only two options

Example: Either I keep smoking, or I'll get fat. I don't want to get fat, so I better keep smoking