Avoiding Common Logical Fallacies

Logical fallacies are mistakes in reasoning. They may be intentional or unintentional, but in either case they undermine the strength of an argument.

Hasty Generalization: A generalization based on too little evidence, or on evidence that is biased.
Example: All _____ are like _____. Or: After being in New York for a week, I can tell you: All New Yorkers are rude.

Either/Or Fallacy: Only two possibilities are presented when in fact several exist.
Example: America: love it or leave it. Or: Shut down all nuclear power plants, or watch your children and grandchildren die from radiation poisoning.

Non Sequitur: The conclusion does not follow logically from the premise.
Example: My teacher is nice; I'll learn a lot from her. Or: This politician was a war hero; he'll be willing to stand tough for America.

Ad Hominem: Arguing against the person instead of against the issue.
Example: We can't elect him mayor. He gambles! Or:

Red Herring: Distracting the audience by drawing attention to an irrelevant issue.
Example: How can he be expected to manage the company? Look at how he manages his house! Or: Why worry about nuclear war when we're all going to die anyway?

Circular Reasoning: Asserting a point that has just been made. Sometimes called "begging the question."
Example: He is ignorant because he was never educated. Or: We make mistakes because are imperfect.

False Analogy: Wrongly assuming that because two things are alike in some ways, they must be alike in all ways.
Example: A person who wants to privatize public schools might reason:
 "Schools are no different than a business. It needs to compete in the open marketplace and this will make all schools successful.

Post Hoc, Ergo Propter Hoc: The mistake of assuming that, because event "a" is followed by event "b", event "a" caused event "b".
Example: It rained today because I washed my car. Or: The stock market fell because the Japanese are considering implementing an import tax.

Equivocation: Equates two meanings of the same word falsely.
Example: The end of a thing is its perfection; hence, death is the perfection of life. (The argument is fallacious because there are two different definitions of the word "end" involved in the argument.)

< http://www.dartmouth.edu/~writing/materials/student/ac_paper/logic.shtml>