

ERRORS IN REASONING WORKSHEETS

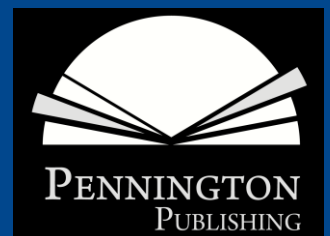
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**TEACH
STUDENTS to
IDENTIFY and
AVOID
FALLACIOUS
ARGUMENTS**



**TEACH LOGIC
and REASONING
SKILLS through
WRITING**



Synonym Errors in Reasoning

Definition: A synonym error occurs when the writer substitutes one term or idea for another in the argument, yet the terms or ideas are not same.

Example: Getting advice on major decisions is essential. Mary always asked her grandfather for advice. He has a lifetime of experiences to draw upon to counsel his granddaughter, and older men have valuable wisdom to impart if one but asks.

Explanation: In this line of argument wisdom has been treated as a synonym for experience. Not all experiences produce wisdom or lead to good advice.

Practice

Democracies have multiple political parties. The Republic of Xandra has only one political party with real power. This dictatorship has been in control of since 1919.

Explain the Synonym Error: _____

Application

Write a topic sentence on a subject of your choice with supporting evidence and analysis which includes a synonym error in reasoning. Explain the synonym error.

Topic Sentence: _____

Evidence: _____

Analysis with Synonym Error: _____

Explain the Synonym Error: _____

Non Sequitur Errors in Reasoning

Definition: A non sequitur error means that the argument does not follow logically. In other words, the conclusion cannot be reached from the facts presented.

Example: The high school students have a new English-language arts teacher. Ms. So has taught fifth grade for seven years. Almost every student is earning an A. They must be excellent writers.

Explanation: The fact that most students are receiving A grades may not be because they are strong writers. Ms. So may be an easy grader or too accustomed to the writing of fifth graders.

Practice

The blue ocean and sky have an important relationship. If the sky is blue, and blue is the color of the ocean; then the sky must be made of ocean water.

Explain the Non Sequitur Error: _____

Application

Write a topic sentence on a subject of your choice with supporting evidence and analysis which includes a non sequitur error in reasoning. Explain the non sequitur error.

Topic Sentence: _____

Evidence: _____

Analysis with Non Sequitur Error: _____

Explain the Non Sequitur Error: _____

Red Herring Errors in Reasoning

Definition: A red herring error means that an unconnected reference is used to distract the reader from the argument. A red herring refers to a smelly fish that was sometimes used to throw hunting dogs off the track of the fox in English foxhunts.

Example: Everyone deserves the right to be heard. Racist hate groups have their rights to free speech even if they advocate violence. Facebook shouldn't censor their racist posts.

Explanation: The U.S. Supreme Court has ruled that free speech is not an unlimited right. If it endangers others, it may be restricted.

Practice

When asked about the major challenges facing our planet, the candidate has a ready answer. The politician suggests that poverty remains the most important problem in the world today. However, the world has always had its share of poor people.

Explain the Red Herring Error: _____

Application

Write a topic sentence on a subject of your choice with supporting evidence and analysis which includes a red herring error in reasoning. Explain the red herring error.

Topic Sentence: _____

Evidence: _____

Analysis with Red Herring Error: _____

Explain the Red Herring Error: _____

Unsupported Generalization Errors in Reasoning

Definition: An unsupported generalization error applies specific facts to a broad generalization without justification.

Example: Getting advice on major decisions is essential. Mary always asked her grandfather for advice. He has a lifetime of experiences to draw upon to counsel his granddaughter, and older men have valuable wisdom to impart if one but asks.

Explanation: It has not be established that more punishment leads to better student behavior.

Practice

Hair color is genetically determined. Bobby and Amanda have blonde hair. They both excel at sports. All blonde children excel at sports.

Explain the Unsupported Generalization Error: _____

Application

Write a topic sentence on a subject of your choice with supporting evidence and analysis which includes an unsupported generalization error in reasoning. Explain the unsupported generalization error.

Topic Sentence: _____

Evidence: _____

Analysis with Unsupported Generalization Error: _____

Explain the Unsupported Generalization Error: _____

Errors in Reasoning Practice Answers

Synonym Error: The writer substitutes *dictatorship* for *undemocratic*. However, not all undemocratic forms of government are the same as dictatorships.

Non Sequitur Error: The conclusion that “the sky must be made of ocean water” does not follow logically from the facts presented.

Red Herring Error: The statement “the world has always had its share of poor people” attempts to distract the reader from the issue of poverty as the most important world problem.

Unsupported Generalization Error: The fact that specific children who have blonde hair are good athletes does not justify the broad generalization that “All blonde children excel at sports.”

Poisoning the Well Error: The president’s argument that reducing taxes will encourage taxpayers to spend more money is weakened by the comment that all leading economists have criticized the plan.

Cause and Effect Errors: Sneezing after a commercial is a matter of coincidence. Commercials do not cause sneezing. There is no logical cause-effect connection.

Begging the Question Errors: The statement assumes an advisory document requires homeowners to agree to the advice.

Either-Or Errors: The statement ignores other options that true Americans might choose.

Comparison Errors: The price of tea and gas are unrelated issues and cannot be compared.

Questionable Authority Errors: In the first example, the expert is non-specific. In the second example, a mathematician is not an expert in matters of love.

Contradiction Errors: Skateboard injuries contradict the claim that the sport is completely safe.

Inconsistency Errors: The arguments that children should be required to wear helmets while riding bicycles, but not while in-line skating, are not in agreement.

Omission Errors: The fact that the Folsom High School Band is the only band in the city has been omitted.

Oversimplification Errors: This oversimplification ignores the complicated components such as baseball strategy, substitutions, and statistical probability.

Sampling Errors: Only about 20 dentists were surveyed as part of the sample group—hardly enough people upon whom to base a conclusion that “three out of every four dentists recommend flossing three times per day.”