

Name: _____ Date: _____

Outsmart the Sophists: A 10th Grade Logic and Critical Thinking Quiz

Deconstruct complex arguments using syllogistic reasoning and formal inference techniques to sharpen analytical decision-making skills.

1. A defense attorney argues: 'My client cannot be a thief because he is a devoted father and donates to the local animal shelter.' Which logical fallacy is being committed?

- A. Post hoc ergo propter hoc
- B. Red herring
- C. Circular reasoning
- D. Affirming the consequent

2. In formal logic, a _____ is a deductive argument consisting of two premises and a conclusion, where the conclusion is drawn from the relationship between the terms in the premises.

- A. Hypothesis
- B. Analogy
- C. Syllogism
- D. Correlation

3. In a valid deductive argument, if all the premises are true, the conclusion must also be true by necessity.

- A. True
- B. False

4. Consider this statement: 'If it is a Tuesday, the cafeteria serves tacos. Today is not a Tuesday. Therefore, the cafeteria is not serving tacos.' What error in reasoning is occurring here?

- A. Denying the antecedent
- B. Modus tollens
- C. Slippery slope
- D. Begging the question

5. When a conclusion is drawn by moving from specific observations to a broader generalization, the thinker is using _____ reasoning.

- A. Abductive
- B. Deductive
- C. Inductive
- D. Circular

6. The 'Genetic Fallacy' occurs when an argument is judged as either good or bad based solely on where it came from or who said it.

- A. True

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B. False

7. Which logical principle is applied in the following scenario: 'To graduate, you must pass Math or Science. You failed Science. Therefore, you must pass Math.'

- A. Equivocation
- B. Hasty Generalization
- C. Disjunctive Syllogism
- D. Confirmation Bias

8. A 'Sound' argument is one that is both _____ and has premises that are actually true in the real world.

- A. Lengthy
- B. Valid
- C. Persuasive
- D. Subjective

9. A historian writes: 'No one has ever proven that King Arthur didn't exist, so he must have been a real historical figure.' This represents an Appeal to _____.

- A. Authority
- B. Emotion
- C. Ignorance
- D. Popularity

10. In logic, the 'Law of Identity' states that a thing is the same as itself ($A = A$).

- A. True
- B. False