Answer Key: Detective of Distraction: 5th Grade Logic & Fallacy Quiz

Expose sneaky arguments and flawed shortcuts. Use your analytical skills to separate solid facts from tricky reasoning errors in everyday life.

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1. Imagine your friend says, 'If we don't buy this new video game today, we will never have fun again!' Which logical error are they making?

Answer: C) False Dilemma (Either/Or)

> A False Dilemma suggests there are only two extreme options (buy the game or never have fun) while ignoring all other possibilities in between.

2. A 'Strong' inductive argument means the conclusion is 100% guaranteed to be true forever.

Answer: B) False

> Inductive reasoning deals with probability, not absolute certainty. Even a strong argument based on patterns could change with new evidence.

3. Complete the logical pattern: (1) All reptiles are cold-blooded. (2) A chameleon is a reptile. (3) Therefore, a chameleon is _____.

Answer: C) cold-blooded

> This is a deductive argument. If the first two statements (premises) are true, the conclusion about the chameleon being cold-blooded must be true.

4. During a debate about school lunch, Leo says, 'We should have more salad.' Maya replies, 'Leo wants us to eat nothing but grass like cows!' What fallacy did Maya use?

Answer: B) Straw Man

> A Straw Man fallacy happens when someone twists an opponent's argument into something ridiculous to make it easier to attack.

5. Which of these is an example of ANALOGICAL reasoning?

Answer: A) Since this key fits the front door, it will likely fit the back door too.

> Analogical reasoning compares two similar things (two doors) to draw a conclusion about one based on the other.

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6. When someone says 'Everyone in class is wearing these shoes, so you should too,' they are using the Bandwagon fallacy.

Answer: A) True

> The Bandwagon fallacy claims that because something is popular, it is the right or best thing to do.

7. An argument is considered _____ if the logic is correct AND all the premises are actually true facts.

Answer: A) Sound

> Soundness is the gold standard for arguments; it means the reasoning is logically 'valid' and the starting points are 100% true.

8. If you see dark clouds, hear thunder, and conclude it is about to rain, what type of reasoning are you using?

Answer: C) Inductive Reasoning

> Inductive reasoning uses specific observations (clouds/thunder) to make a broad prediction about what will likely happen (rain).

9. The 'Ad Hominem' fallacy is when you focus on an opponent's character or personality instead of their actual argument.

Answer: A) True

> Ad Hominem is Latin for 'to the person.' It is a distraction tactic used to avoid talking about the actual topic.

10. In logic, a _____ is a starting statement that provides evidence or reasons for a conclusion.

Answer: B) Premise

> Premises are the building blocks of an argument. They provide the 'why' that leads to the final 'therefore' (the conclusion).