

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Answer Key: Your Detective Handbook: Solving 7th Grade Logic Games

Expose weak arguments and track down hidden logical patterns as you defend your own conclusions against the tricks of deceptive reasoning.

**1. A school menu says 'Either we serve pizza or tacos today.' If the cafeteria is not serving pizza, what must be true according to logic?**

**Answer:** B) They are serving tacos.

This is a disjunctive syllogism. When you are given two choices (A or B) and one is proven false, the other must be true.

**2. When a person claims that a new video game must be amazing simply because it is the most popular game on the app store, they are using the \_\_\_\_\_ fallacy.**

**Answer:** A) Bandwagon

The bandwagon fallacy occurs when someone argues that because a lot of people like or do something, it must be good or correct.

**3. True or False: In a sound argument, the logic must be valid AND the starting facts (premises) must actually be true.**

**Answer:** A) True

To be considered 'sound,' an argument needs both correct logical structure (validity) and real-world accuracy (truth).

**4. Which of these is the best example of 'Inductive Reasoning'?**

**Answer:** C) Since it has snowed every January for ten years, it will likely snow this January.

Inductive reasoning uses specific past patterns to make a likely prediction about the future, rather than a 100% certain proof.

**5. An argument that 'attacks the person' making the claim rather than the claim itself is known as an \_\_\_\_\_ attack.**

**Answer:** B) Ad Hominem

Ad hominem is Latin for 'to the person.' It is a fallacy where someone ignores the facts and just insults their opponent.

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**6. If 'All mammals have fur' and 'A whale is a mammal,' what is the logically certain conclusion?**

**Answer:** C) A whale has fur.

This is deductive reasoning. If the general rule is true for the whole group, it must be true for every individual member of that group.

**7. True or False: A 'Hasty Generalization' is a fallacy where someone makes a broad rule based on only one or two small examples.**

**Answer:** A) True

Hasty generalizations happen when you jump to a conclusion without enough evidence to support such a big claim.

**8. Which logical concept describes the 'If P, then Q' rule where if the first thing happens, the second must follow?**

**Answer:** A) Conditional Statement

A conditional statement sets up a requirement (If...) and a result (then...). It is a foundation of clear logic.

**9. If you argue that 'We should allow students to use phones in class because if we don't, they will never learn to use technology and the economy will collapse,' you are using a \_\_\_\_\_ fallacy.**

**Answer:** B) Slippery Slope

The slippery slope fallacy claims that one small step will inevitably lead to a chain of extreme and unlikely disasters.

**10. True or False: Using 'Critical Thinking' means you should believe everything you read as long as it is written in a textbook.**

**Answer:** B) False

Critical thinking involves questioning and evaluating information from all sources to see if the reasoning behind it is sound.