

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

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

## Answer Key: Crack the Detective's Code: 3rd Grade Logic & Thinking Quiz

Moving beyond simple guessing, these exercises strengthen foundational deductive reasoning using relatable daily scenarios and clear patterns.

**1. Mia noticed that every time the sky turns dark gray, it starts to rain. Today, the sky is dark gray. What is the most logical guess for Mia to make?**

**Answer:** B) It will probably rain soon.

Mia is using a pattern she saw before to make a logical prediction about what will happen next.

**2. If you know that all mammals have hair and a whale is a mammal, it is logical to say that a whale has hair.**

**Answer:** A) True

This follows a logical rule: if a group has a trait, and a specific animal belongs to that group, the animal has that trait too.

**3. Leo is wearing a swimsuit and carrying a towel. Where is Leo most likely going?**

**Answer:** C) The swimming pool

We use logic to connect specific tools, like a swimsuit, to the activity they are used for.

**4. Sam says, 'You should vote for me for Class President because I have the coolest shoes.' Why is this argument weak?**

**Answer:** A) Shoes do not help someone lead a class.

Critical thinking involves checking if a reason actually supports the conclusion. Cool shoes don't relate to leadership skills.

**5. Is it logical to say: 'If I ate an apple for lunch today, I must eat an apple for lunch every single day for the rest of my life'?**

**Answer:** B) False

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

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

Logic requires enough evidence. One single event isn't enough to prove that something will always happen.

**6. If all squares are shapes, and this drawing is a square, then this drawing is a \_\_\_\_\_.**

**Answer:** B) Shape

This is a basic logical inference. If an object belongs to a category (squares), it also belongs to the bigger group (shapes).

**7. Sarah's mom says, 'You can either have an apple or a banana for your snack.' Sarah does not want an apple. What is the logical choice left for Sarah?**

**Answer:** C) Eat the banana.

When there are only two choices and one is removed, the other choice must be the one that remains.

**8. A logical person should believe everything they see in a TV commercial without asking questions.**

**Answer:** B) False

Critical thinking means evaluating information and looking for evidence rather than believing everything immediately.

**9. If the ice cream shop is only open when it is sunny, and it is currently snowing, we can logically assume the shop is \_\_\_\_\_.**

**Answer:** B) Closed

Logic helps us determine what is NOT happening. If the condition for being open (sun) isn't met, the shop must be closed.

**10. Which of these is a fact that can be proven, rather than just an opinion?**

**Answer:** C) The Earth moves around the Sun.

Critical thinking involves distinguishing between personal feelings (opinions) and things that can be demonstrated with evidence (facts).