

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

## Dissect the Scientific Logic: A 6th Grade General Science Quiz

Can you distinguish a prediction from a procedure? Identify core scientific steps using everyday scenarios like bicycle rust and light bulb failures.

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**1. A student notices that her bicycle chain is rusting after being left in the rain. Which initial step of the scientific method does this represent?**

- A. Forming a Hypothesis
- B. Making an Observation
- C. Analyzing Data
- D. Drawing a Conclusion

**2. When a scientist writes down a 'testable explanation' for an event, such as 'If I use a LED bulb, then the battery will last longer,' what is this called?**

- A. A Theory
- B. A Conclusion
- C. A Hypothesis
- D. A Procedure

**3. In the scientific method, after a scientist collects information through an experiment, they must perform \_\_\_\_ to see what the results mean.**

- A. Data Analysis
- B. Hypothesis Building
- C. Initial Research
- D. Observation

**4. True or False: A scientist should only communicate their results if their hypothesis was proven to be correct.**

- A. True
- B. False

**5. Which of these is the most likely step to take immediately after you realize your flashlight won't turn on?**

- A. Publish a paper
- B. Create a graph of light brightness
- C. Ask a question about why it isn't working
- D. Change all the parts at once

**6. A step-by-step list of instructions followed during an experiment is known as the \_\_\_\_.**

- A. Variable
- B. Procedure

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- C. Graph
- D. Research

**7. True or False: Doing research before forming a hypothesis helps a scientist make a more informed prediction.**

- A. True
- B. False

**8. If a scientist finds that their data does NOT support their hypothesis, what is the best next step?**

- A. Change the data to match the hypothesis
- B. Give up on science entirely
- C. Revise the hypothesis and test again
- D. Ignore the experiment results

**9. The final step where a scientist summarizes the results and states whether the hypothesis was supported is called the \_\_\_\_.**

- A. Observation
- B. Introduction
- C. Conclusion
- D. Question

**10. True or False: The scientific method is a rigid 'rulebook' that must always be followed in the exact same order without variation.**

- A. True
- B. False