

Name \_\_\_\_\_

## CSI: The Scientific Method in Criminal Investigations

### Open-Ended Questions Answer Key

1. Answer: This answer will vary but should include steps such as asking questions about the burglary, making observations at the crime scene, forming hypotheses about how the break-in occurred, conducting experiments by collecting evidence, gathering data through fingerprint analysis or witness interviews, analyzing the data for patterns or connections, and ultimately drawing conclusions about the perpetrator based on the evidence.
2. Answer: Detectives may face challenges like contamination of evidence, weather conditions, or the need to balance thorough evidence collection with respecting privacy rights. To overcome these challenges, detectives should use proper evidence handling procedures, document the collection process, and work within legal constraints to ensure a fair investigation.
3. Answer: This answer will vary based on the real-life case provided, but it should include details about how the scientific method was applied, such as the questions asked, observations made, hypotheses formed, experiments conducted (e.g., DNA analysis or fingerprint matching), data analysis, and how the method led to solving the case or identifying the perpetrator.
4. Answer: This answer will vary, but it should include considerations of respecting individual rights, ensuring the proper handling of evidence, and conducting fair interviews and interrogations. Detectives should strive for a balance between pursuing justice and protecting the rights of suspects and witnesses through adherence to legal and ethical standards.

