

Name \_\_\_\_\_

## CSI: The Scientific Method in Criminal Investigations

### Short-Answer Answer Key

1. Answer: Detectives can use DNA testing to compare DNA found at a crime scene to DNA samples from potential suspects. If there is a match, it can link a suspect to the crime or provide valuable evidence in solving the case.
2. Answer: Detectives gather and preserve evidence by carefully collecting physical items, taking photographs, creating sketches, and labeling and storing evidence properly. This is important because it ensures that evidence remains intact and can be used to build a case against a suspect or exonerate an innocent person.
3. Answer: Interviewing witnesses and suspects involves asking questions, forming hypotheses about their involvement or knowledge of the crime, and analyzing their responses for valuable information. This process is systematic and follows the scientific method by gathering data and drawing conclusions based on evidence.
4. Answer: Crime scene reconstruction involves piecing together the sequence of events that occurred during a crime. Detectives use their observations and evidence to recreate the crime scene as accurately as possible. This process helps in understanding what happened, identifying potential suspects, and drawing conclusions about the crime.
5. Answer: Re-examining cold cases involves asking new questions, forming new hypotheses, and using advanced technology for experiments and data analysis. The scientific method is applied by systematically reviewing all available evidence. Sometimes, advancements in forensic science and technology, along with fresh perspectives, can lead to breakthroughs in solving cases that were previously unsolved.

