Unit 01: Crime Scene Examination

Content Area: Science
Course(s): Forensics
Time Period: Semester 1
Length: 4 weeks
Status: Published

Standards

Structure and Function

Stability and Change

Asking Questions and Defining Problems

Engaging in Argument from Evidence

Developing and Using Models

Cause and Effect

SCI.HS.ETS1.A Delimiting Engineering Problems

SCI.HS-ETS1-2 Design a solution to a complex real-world problem by breaking it down into smaller, more

manageable problems that can be solved through engineering.

SCI.HS.ETS1.C Optimizing the Design Solution

Enduring Understandings

- 1. The field of forensic science is continually changing with the advancement of science and technology.
- 2. Forensic science utilizes concepts from all scientific disciplines and the nature of science to uphold the law.
- 3. Modern media sensationalizes the field of forensic science which influences the perceptions of jurors within trials.
- 4. Specific procedures must be followed to ensure that evidence is not contaminated.
- 5. The key to determining the provenance of an item is individualization.

Essential Questions

- 1. How have scientific advancements contributed to the evolution of forensic science?
- 2. How are the sciences applied to legal and criminal investigations?
- 3. How is the depiction of forensic science in popular culture misleading?
- 4. How have societal views and values affected the role of scientific evidence in the judicial system?

- 5. What problems arise from improper handling of the crime scene investigation?
- 6. Why shouldn't you convict someone on evidence based on class characteristics alone?

Knowledge and Skills

Knowledge:

- 1. Students will know the major contributors to the development of forensic science and the significance of their contributions to the field as a whole.
- 2. Students will know Locard's exchange principle and be able to explain its application to forensics.
- 3. Students will know that modern media sensationalizes the field of forensic science which influences public perception of the field.
- 4. Students will know the structure of the US judicial system and the role of forensic scientists within the court system.
- 5. Students will know the Supreme Court decisions that specify admissibility rules for evidence.
- 6. Students will know the difference between testimonial and physical evidence.
- 7. Students will know the structure and organization of modern crime labs.
- 8. Students will know the proper procedures for analyzing a crime scene including interviewing, examining, documenting, and processing the crime scene.
- 9. Students will know how to collect and package different types of evidence.
- 10. Students will know the difference between class and individual characteristics and their usefulness in crime solving.

Skills:

- 1. Explain why observation skills are important to forensic investigators.
- 2. Use deductive reasoning to synthesize a situation where only partial information is known.
- 3. Create an argument for and against the use of eyewitness testimony in crime scene investigation.
- 4. Develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed word as they relate to the individual, global society and the environment
- 5. Cite evidence of the development of scientific technology in the advancement of forensic science
- 6. Draw conclusions as to how forensic science relates to the application of law in our criminal justice

system

- 7. Accurately document a mock crime scene utilizing proper procedures.
- 8. Distinguish between different types of evidence and determine which area of the modern crime lab would evaluate said evidence.
- 9. Model correct procedures for collecting and packaging evidence at a crime scene.
- 10. Utilize class and individual evidence to analyze a criminal case.

Assessments

https://docs.google.com/document/d/1wR7bQF-8AQoRrt0g4C3hKja0yjwDjC9_BiAmONWbTcI/edit

Modifications

https://docs.google.com/document/d/1ODqaPP69YkcFiyG72fIT8XsUIe3K1VSG7nxuc4CpCec/edit