

Grade & Course: Forensic Science	Topic: Unit 2	Duration: 5 Weeks
Teachers: Forensic PLC Teachers	Crime Scene Investigation & Collection	
<p>Georgia Standards and Content:</p> <p>SFS2. Obtain, evaluate, and communicate information on various scientific techniques to analyze physical, trace, and digital evidence.</p> <p>a. Plan and carry out an investigation to determine the value of physical and trace evidence.</p> <p>SFS1. Obtain, evaluate, and communicate information to properly conduct a forensic investigation of a crime scene.</p> <p>b. Plan and carry out investigations using the scientific protocols for analyzing a crime scene (e.g., search, isolate, collect, and record).</p> <p>c. Construct an argument from evidence explaining the relevance of possible evidence at the site of an investigation.</p> <p>d. Develop models to analyze and communicate information obtained from the crime scene. (Clarification statement: Properly document and sketch a crime scene.)</p>		
Narrative / Background Information		
<p>Prior Student Knowledge: (REFLECTION – PRIOR TO TEACHING THE UNIT)</p> <p>Students have basic knowledge of what Forensic Science is and the history of Forensic Science. Students are also familiar with the roles of a forensic investigator and a forensic scientist as well as the difference between observation and perception. Students are aware that human minds process and filter information which is why forensic investigators and scientists must document, record, and collect as much useful evidence as possible to remove the unintended filtering and bias of the human mind from the investigation.</p>		
<p>Year-Long Anchoring Phenomena: (LEARNING PROCESS)</p> <p>An unidentified body was found in an abandoned Connex container in a shipping yard.</p>		
<p>Unit Phenomena (LEARNING PROCESS)</p> <p>Officers in the JonBenet Ramsey case made mistakes that may have resulted in the contamination or destruction of evidence.</p>		
<p>Inquiry Statement:</p> <p>Inadequate evidence collection can lead to false imprisonment.</p>		
<p>Global Context:</p> <p>Scientific and Technical Innovation- Systems, Methods, Processes, and Solutions</p>		
<p>Science & Engineering Practices:</p> <ul style="list-style-type: none"> ● Plan and Carry Out Investigations ● Constructing Arguments From Evidence ● Developing Models to analyze and Communicate Information 	<p>Disciplinary Core Ideas: (KNOWLEDGE & SKILLS)</p> <p>SFS1. B, C, D</p> <p>SFS2. A</p> <ul style="list-style-type: none"> ● Locard’s Principle of Exchange ● Types of Evidence ● Collecting & Analyzing Evidence 	<p>Crosscutting Concepts: (KNOWLEDGE & SKILLS)</p> <ul style="list-style-type: none"> ● Patterns <hr/> <p>Key and Related Concepts:</p> <ul style="list-style-type: none"> ● Evidence ● Patterns
<p>Possible Preconceptions/Misconceptions: (REFLECTION – PRIOR TO TEACHING THE UNIT)</p> <p>-That circumstantial evidence is not trustworthy</p>		
<p>Key Vocabulary: (KNOWLEDGE & SKILLS)</p> <p>chain of custody circumstantial evidence class evidence</p>		

crime-scene investigation
 crime-scene reconstruction
 direct evidence
 first responder
 individual evidence
 paper bindle
 primary crime scene
 secondary crime scene
 trace evidence
 Locard's Principle of Exchange

Inquiry Questions:

Factual

What are the different types of evidence?
 What is Locard's principle of exchange?
 What is the proper sequence of investigating a crime scene?

Conceptual

How do we secure the scene and separate witnesses?
 How do we scan and see the scene?
 How do we sketch the scene?
 How do we search for evidence?
 How do we secure and collect evidence?

Debatable

When do police have the authority to search a scene?
 When is collected evidence not useful?

Summative Assessment

Unit Objectives:

Learning Activities and Experiences	Inquiry & Obtain: (LEARNING PROCESS)	Evaluate: (LEARNING PROCESS)	Communicate: (LEARNING PROCESS)
<p>Week 1: (2 days)</p>	<p>Officers in the JonBenet Ramsey case made mistakes that may have resulted in the contamination or destruction of evidence. (discussion post)</p> <p>Locard's Principle of Exchange & Types of Evidence Notes</p> <ul style="list-style-type: none"> ○ Direct ○ Circumstantial <ul style="list-style-type: none"> ● Physical ● Biological <ul style="list-style-type: none"> ● Class ● Individual 	<p>Seven S's of Crime Scene Investigation (with practice)</p> <ul style="list-style-type: none"> -Securing the scene -Separating witnesses <p>Lab- Securing the Scene and Separating Witnesses with Interview Techniques</p>	

	Lab - Identifying Types of Evidence		
Week 2: (3 days)	Seven S's of Crime Scene Investigation (with practice) - Scanning the scene - Seeing the scene Lab- Crime Scene Photography	Seven S's of Crime Scene Investigation (with practice) - Sketching the scene Lab- Sketch a Crime Scene	Seven S's of Crime Scene Investigation (with practice) - Searching for evidence - Securing and collecting evidence Lab Day 1- Searching a Crime Scene and Securing and Collecting Evidence Using Proper Techniques
Week 3: (2 days)	Seven S's of Crime Scene Investigation (with practice) Lab Day 2	Case studies review (pg 41 text) & discussion. Unit 2 closer quiz.	
Week 4: (3 days)	Locard's Principle of Transfer Activity (pg 44-47)	Crime Scene Investigation Activity(pg 48-55) -sketch the crime scene -secure and collect & package evidence lab	Finish Crime Scene Activity (Crime Scene activity could serve as unit 2 assessment)

Resources (hyperlink to model lessons and/or resources):

Bertino & Bertino Forensic Science Text- 3rd Edition

Reflection: Considering the planning, process and impact of the inquiry

Prior to teaching the unit	During teaching	After teaching the unit
<p>-How can we help students understand that circumstantial evidence can be beneficial and even be used to convict?</p> <p>-How to help students determine what evidence is useful to collect (rather than too much)?</p> <p>Fill out cell phone permission form for 8/29-9/10 to use phones for photography.</p>		