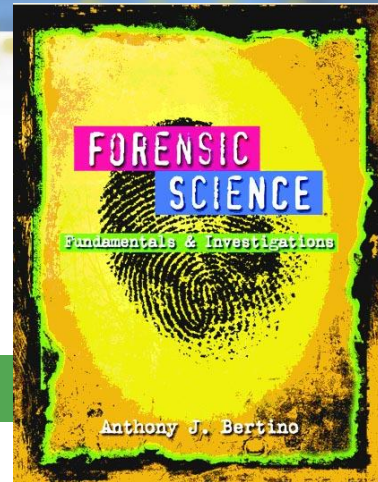


Chapter 2 *Crime Scene Investigation and Evidence Collection*

By the end of this chapter you will be able to:

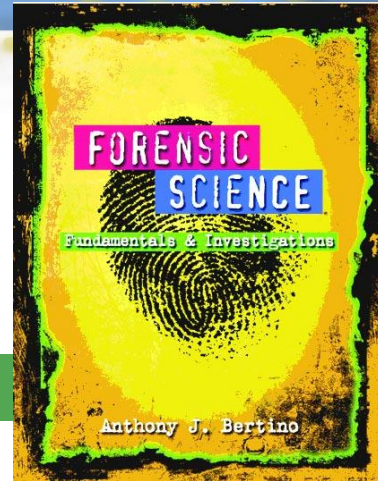


- Summarize Locard's exchange principle
- Identify four examples of trace evidence
- Distinguish between direct and circumstantial evidence
- Identify the type of professionals who are present at a crime scene
- Describe how evidence from a crime scene is analyzed

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Chapter 2 *Crime Scene Investigation and Evidence Collection*

By the end of this chapter you will be able to:



- Summarize the three steps of a crime scene investigation
- Explain the importance of securing the crime scene
- Identify the methods by which a crime scene is documented
- Demonstrate proper technique in collecting and packaging trace evidence



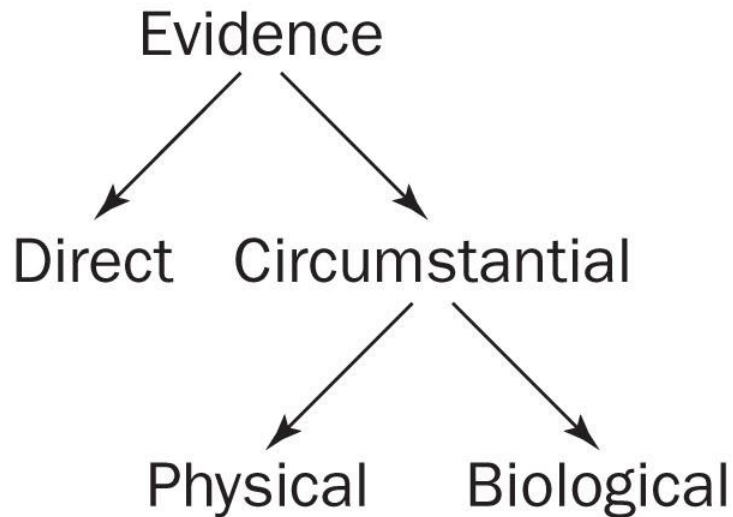
Principle of Exchange

**Established by Dr. Edmond Locard,
the principle states:**

- When a person comes in contact with an object or another person, a cross-transfer of physical material can occur
- Study of the material can determine the nature and duration of the transfer



Types of Evidence

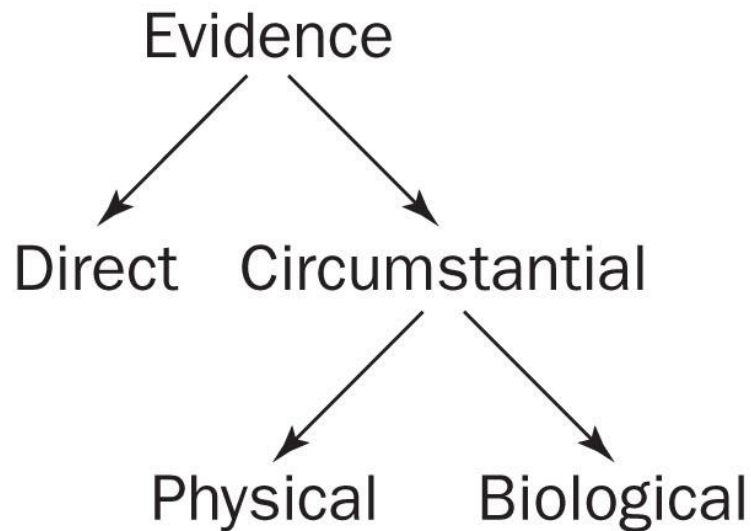


Direct evidence

Testimony by a witness about what that witness saw, heard, or did



Types of Evidence



Circumstantial evidence

- also called **Indirect**
- *trace evidence*

Physical evidence

- e.g., fingerprints

Biological evidence

- e.g., blood or hairs



Types of Evidence



Explain why this would be or would not be trace evidence



The Crime Scene Investigation Team

Who is at the crime scene?

- o Police and
- o District attorney (possibly)
- o Crime scene investigators
- o Medical examiners
- o Detectives
- o Specialists

The Seven S's of Crime Scene Investigation



1. **Secure** the scene
2. **Separate** the witnesses
3. **Scan** the scene
4. **Seeing** the scene
5. **Sketch** the scene
6. **Search** for evidence
7. **Secure** the collected evidence



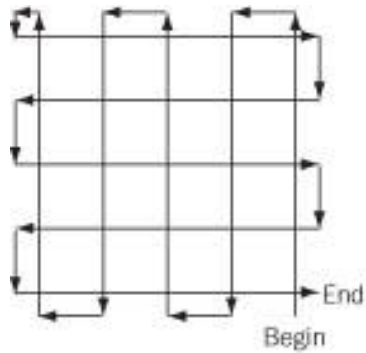
Crime-Scene Sketch Form

Scale: $\frac{1}{4}'' =$ _____ feet

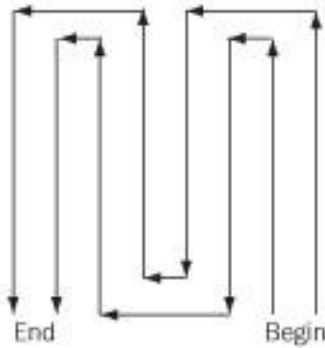
Case number _____
Date _____
Location _____
Name _____



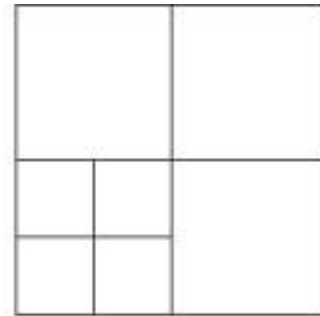
Crime-Scene Search Patterns



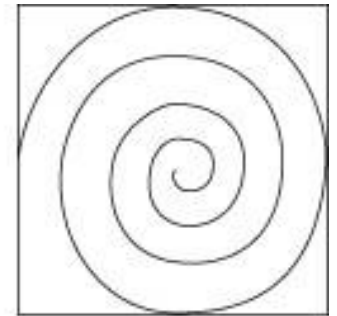
Grid



Linear



Quadrant or Zone

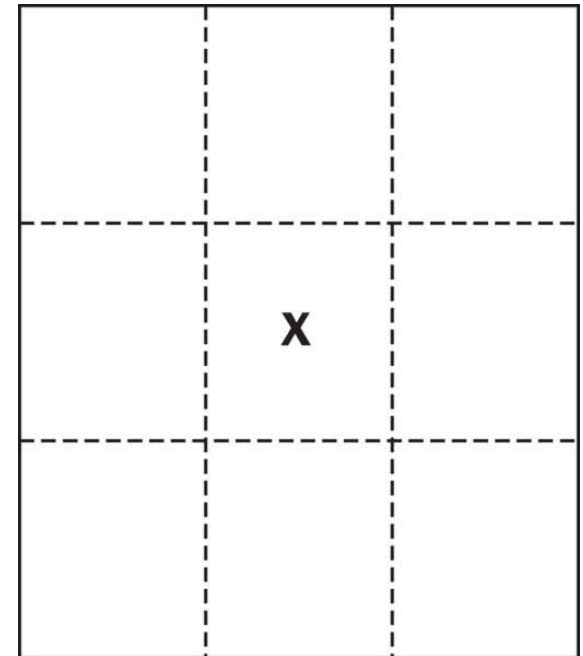


Spiral



Packaging the evidence

1. Crease a clean paper and place evidence in the X position
2. Fold in the left and right sides, and then fold in the top and bottom
3. Put the bundle into a plastic or paper evidence bag affixing a seal over the opening
4. Write your name on the seal





Evidence ID Forms

Evidence	
Case # _____	Inventory # _____
Item # _____	Item description _____
_____	_____
_____	_____
Date of recovery _____	Time of recovery _____
Location of recovery _____	
Recovered by _____	
Suspect _____	
Victim _____	
Type of offense _____	
Chain of custody	
Received from _____	By _____
Date _____	Time _____ AM or PM
Received from _____	By _____
Date _____	Time _____ AM or PM
Received from _____	By _____
Date _____	Time _____ AM or PM
Received from _____	By _____
Date _____	Time _____ AM or PM

Evidence Inventory Label	
Case # _____	Inventory # _____
Item # _____	Item description _____
_____	_____
_____	_____
Date of recovery _____	Time of recovery _____
Location of recovery _____	
Recovered by _____	
Suspect _____	
Victim _____	
Type of offense _____	
Chain of custody	
Received from _____	By _____
Date _____	Time _____ AM or PM
Received from _____	By _____
Date _____	Time _____ AM or PM
Received from _____	By _____
Date _____	Time _____ AM or PM
Received from _____	By _____
Date _____	Time _____ AM or PM



Chain of Custody

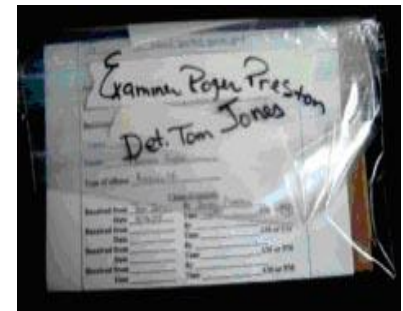
Maintaining a chain of custody log is essential to present credible evidence in court





Chain of Custody (cont'd.)

1. Bag the evidence
Add identification
Seal it
Sign it across the sealed edge
2. Sign over to a lab technician
Open bag on non-sealed edge
3. Return items to the evidence bag
Seal evidence bag in another bag
Sign the evidence log





Analyze the Evidence

- Facts result from collected evidence processed by the forensic lab
- Lead detective aims to see how facts fit into the crime scenario



Analyze the Evidence

Lab results can:

- Show reliability of witness accounts
- Establish the identity of suspects or victims
- Show suspects to be innocent or link them with a scene or victim



Crime Scene Reconstruction

Crime scene reconstruction involves:

- o Forming a hypothesis of the sequence of events
- o From before the crime was committed through its commission



Staged Crime Scenes

When lab results don't match up with the testimony of witnesses

Common examples:

- Staging a fire—to cover bankruptcy
- Staging a suicide—to cover a murder
- Staging a burglary—to collect insurance money



Staged Crime Scenes

Was the crime scene staged?

Consider:

- Does the type of wound match the weapon?
- Could the wound be easily self-inflicted?
- What were the mood and actions of the victim before the event?
- What were the mood and actions of the suspect before the event?



..... Summary

- Locard's exchange principle:
 - Contact between people and objects can transfer material that can determine the nature and duration of the transfer
- Evidence can be direct or indirect
 - Physical or biological traces
- A crime scene investigation team consists of police, detectives, crime scene investigators, medical investigators, and specialists.



..... Summary

- Investigations consist of recognizing, documenting, and collecting evidence.
- First responding officers identify the extent of the crime scene, secure it, and segregate witnesses.
- Crime scene investigators document the crime scene.
- Evidence is collected, packaged, and labeled.
- The evidence is analyzed and interpreted to fit the crime scenario.