

CRIMINAL INVESTIGATION CASE #0001

THE CASE OF HESTER HIGGINBOTHAM

Introduction

Dr. Edmond Locard helped to advance Forensics in many ways. His exchange principle states that trace evidence can be exchanged between a crime scene, victim and suspect. This exchange could result in leaving trace evidence behind that could help to solve a crime. Today, you will collect trace evidence in hopes that a transfer occurred in an exchange between a victim and the scene of the crime.

Materials

7 Ziploc bags
7 labels (or a roll of masking tape)
Hall Pass
1-2 pairs of gloves
Evidence bag (your teacher will give you this at a later time)
Permanent Marker
1 roll of clear tape
Magnifying Glass
Forceps
Pen/Pencil
7 Chain of Custody sheets
Scissors
7 Index Cards

Scenario

The body of Hester Higginbotham was found in the dumpsters on the [enter road name] in [enter city/county]. Crime scene investigators believe that Mr. Higginbotham was killed at [enter school name] and then was moved to the dumpsters after his death. The investigators believe that the debris found on Mr. Higginbotham's sock holds the key to where his murder took place. The CSI have narrowed down the possible primary crime scene to 7 locations. Can you match the trace evidence found on Mr. Higginbotham's sock to trace evidence from the following locations?

Possible Location #1: [enter area in your school where you want students to search]

Possible Location #2: [enter area in your school where you want students to search]

Possible Location #3: [enter area in your school where you want students to search]

Possible Location #4: [enter area in your school where you want students to search]

Possible Location #5: [enter area in your school where you want students to search]

Possible Location #6: [enter area in your school where you want students to search]

Possible Location #7: [enter area in your school where you want students to search]

Task #1:

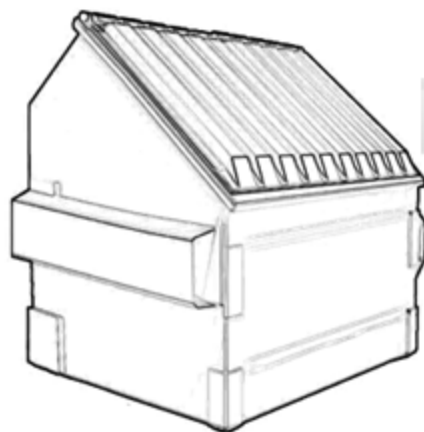
- ✓ Read the Crime Scene Scenario
- ✓ Ensure that you have the materials listed on this sheet
- ✓ Ask your teacher which location you should visit first and highlight it on the front side of this sheet

Task #2:

- ✓ Report to your assigned location.
- ✓ Use the clear tape to collect trace evidence from the ground/floor of your location.
- ✓ Tape the evidence to the blank side of an index card and place the evidence into a Ziploc bag
- ✓ Seal the bag with masking tape or a label and sign it
- ✓ Complete the chain of custody log and staple it to the evidence bag
- ✓ Once you are finished at your designated location, report to the next location on your lab sheet.
- ✓ Repeat the steps above until you have collected evidence from all 7 locations.

Task #3:

- ✓ Now it is time to compare the evidence that you collected from your crime scene to the evidence collected from Mr. Higginbotham's sock.
- ✓ Carefully empty the contents of your evidence package (Mr. Higginbotham's sock) on the paper labeled "EVIDENCE."
- ✓ Next, compare each bag of evidence to the debris found on Mr. Higginbotham's sock. Throw away any evidence that you can rule out as a possible primary crime scene.
- ✓ Use the magnifying glass to compare evidence from the sock to possible crime scene locations. **BE SURE TO KEEP THE EVIDENCE SEPARATE SO THAT YOU DO NOT CROSS CONTAMINATE EVIDENCE!**
- ✓ When you believe that you can solve the case, complete the *Case Analysis* questions provided to you.



CRIME SCENE DO NOT CROSS
CRIME SCENE DO NOT CROSS

Crime Scene Analysis:

Directions: Answer the following questions regarding the activity.

1. Which location do you believe to be the primary crime scene?
2. What reason do you have for drawing this conclusion?
3. Was there anything that happened during the activity that compromised your evidence in any way? If so, explain.
4. Did you notice any similarities between evidence that you collected from the possible crime locations? Was there any debris that was at more than one location?
5. Why was it important to wear gloves during this activity?
6. Why do you think it is important to have the name of the "evidence handler" on both the chain of custody log AND the evidence seal?
7. A burglary occurred at a local convenient store. The assailant dropped his wallet at the crime scene and tripped over a rack of chips and cookies as he made his way toward the door. On his way out the door, his jacket caught on the door and ripped. He jumped in his car and sped away as five people watched him. The assailant got away, but what evidence may lead to his arrest and conviction.
8. Listed below are 10 pieces of evidence that may be found at a crime scene. Beside each piece of evidence, list a possible origin for the evidence.
 1. Glass fragments-
 2. Blood-
 3. Sand-
 4. Wood Chips-
 5. Grass-
 6. Lint-
 7. Leaves-
 8. Motor oil-
 9. Flour-
 10. Welding glasses-