

CTE: Real Life Forensics Brought to the Classroom, Solving the Case



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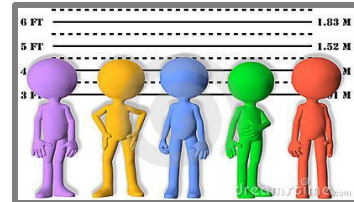
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The Case...

Complaints of a fight bring police to the State Research Facility to investigate the commotion. When the police arrive at the laboratory there are clear signs of a struggle. This laboratory is not assigned to any particular scientist at the facility, so no one is sure who was involved. You, a forensic chemist, are called to the scene to help the authorities analyze the evidence and uncover the facts of the case.

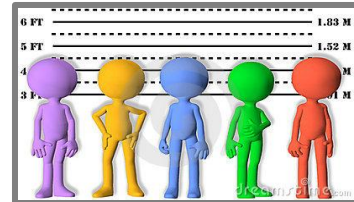
After a crime has taken place, there are various pieces of evidence that may be left at the scene. Evidence is a very important aspect of any criminal investigation, as it can prove the guilt or innocence of someone who is thought to be associated with the crime. Care must be taken to ensure evidence is not tampered with or contaminated. It is your job, as the forensic chemist, to carefully gather and analyze evidence and safeguard it.



Forensic Chemist

A mysterious unknown powder, a scribbled out shopping list and a blood smear – completely unrelated items to most. But they could be meaningful for forensic chemists, who analyze physical evidence and samples for clues to solve crimes.

On a day to day basis a forensic chemist will pull knowledge from diverse disciplines such as chemistry, biology, materials science and genetics to analyze evidence found at crime scenes or in the bodies of crime suspects.



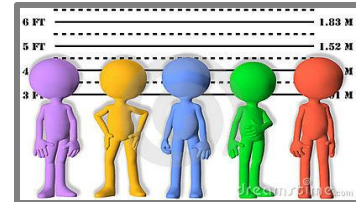
The Scene of the Crime



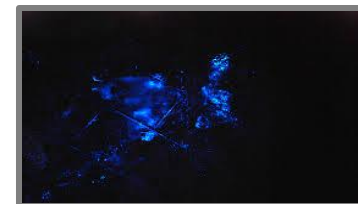
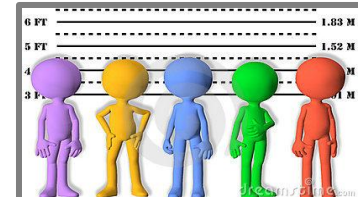
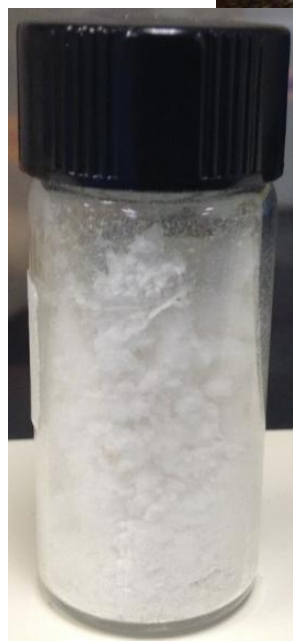
- 1 . Yellow Liquid
2. Papers
3. Broken Bracelet
4. Plastic Bottle

5. Blood Smear
6. Spilled Baking Soda
7. Unidentified white powder
8. Notepad with suspicious shopping list

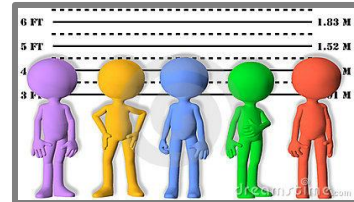
9. Blood Smudge
10. Candy Wrapper
11. Bunsen Burner
12. Piece of a tooth



Unidentified White Powder



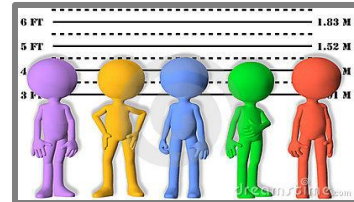
Blood Samples



Suspicious Shopping List

Bred
chees
soffed baltta
otiz
reis kaus
gartick poudla
Jawee
onyun
~~ket~~ rees
sodie
mustahd
buga bantz
baeril
veg stuff

hangres
~~fees wasche~~
chapp strax
eaton baltz
fotkan
noht buk
cohn taker sitation
Pappa towles
katt treetz
~~tee the bräschke~~



The Suspects



1. Adam Avery, lab researcher, was found in a nearby hallway
2. Dr. Becky Bryant was found eating lunch in the cafeteria
3. Dr. Carl Crawley was found in another laboratory
4. Debra Dalton, facility manager, was found in the parking lot
5. Dr. Eli Eastman was found at the scene of the crime

Let the Data Decide!

The following three activities will lead you through the analysis of the evidence. Record your findings at each stage. After each individual piece of the evidence has been scrutinized, use the final table to put it all together. Determine if the evidence found at the scene of the crime points to any of the rounded up suspects.

You will have approximately 20 minutes for each procedure

- * Analyzing and Identifying White Solids
- * Luminol Detection of Simulated Blood
- * Ink Chromatography

The Final Verdict!

Now that you have investigated the crime scene and identified the unknown pieces of evidence, it's time to compare the evidence to the items found on the suspects. Hopefully you have pieced together enough information to help the police narrow down the suspects to just one main suspect.

Use Table 3 to compile all of the information about the evidence that you've gathered and compare it to the evidence found on the suspects. Analyze the compiled data and make a recommendation to the police.

When you have identified the suspect that you believe is the suspect in this investigation, grab Dr. Liz or another member of the team to see if you are correct!

Also visit Wardsci.com for our complete offering of Forensics Activities, Books and Accessories!

THANK YOU!!!

Questions, Comments, Suggestions? Feel free to reach out to me at anytime!

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AND...

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