

Memorial Museum.com

THE CASE OF THE MISSING TROPHY



MemorialMuseum.com

At 7:30 am this morning, Mr. Butler, the principal at Jefferson Middle School, arrived at the school and began unlocking the doors in preparation for the school day. As he unlocked the doors to the gym, his eyes were immediately drawn to the trophy case. **It was OPEN!** This was odd because the trophy case was always locked. Mr. Butler decided to take a closer look and as he approached the case he noticed several shoe print impressions on the floor. These were in black paint and left a trail walking away from the trophy case. Someone must have stepped on the spirit week posters the students had left out to dry on the floor in front of the case the day before. As Mr. Butler approached the trophy case to investigate closer, he noticed some pink, chewed-up bubble gum pushed into the trophy case lock. Someone must have put it there to prevent the case from locking properly. This was suspicious. Mr. Butler began to examine the inside of the trophy case and immediately noticed the Academic All State Trophy was missing. The academic competition team had just won this last week. In its place was a piece of paper with a cryptic message scribbled on it that said – "You will never get the trophy back. You didn't deserve it anyway." Mr. Butler realized what had happened and contacted the resource officer at the school. There was a trophy thief on the loose at Jefferson Middle School.

Mr. Butler needs your help to solve the case of the missing trophy. Utilizing your recently acquired set of forensic science skills, see if you can help solve the crime. Evidence has been collected, packaged, and is ready for your analysis. You will find crime scene notes and a narrative, a diagram of the crime scene, a lifted latent fingerprint from the glass of the trophy case, one of the 2-dimensional shoe impressions that had been left in paint on the floor, a DNA profile from the saliva (well actually the skin cells in the saliva) collected from the bubble gum, and the handwritten note. Crime scene photos are still being processed and are not yet available for review. You will need to compare several of these items to knowns collected from potential suspects. Make sure you are using proper technique during your analysis.

POTENTIAL SUSPECTS:

- 1. JAMIE PORTER: 8th Grader at Jefferson Middle School
- MOTIVE: Jamie was not selected to be on the academic competition team. She was very upset and has been overheard saying things like "I'll show them" and "I am way smarter than the students on the team."
- OTHER IMPORTANT INFORMATION: Jamie did not ride the bus home after school yesterday and told several students she had some business to take care of. Black paint was found on Jamie's backpack.
- 2. MIKAYLA JORDAN: 8th grader at Washington Middle School
- MOTIVE: Mikayla is the team captain for the academic competition team at Washington Middle School Jefferson Middle School's rival. The Jefferson academic competition team just won the academic bowl, beating Washington in the final round.
- OTHER IMPORTANT INFORMATION: Mikayla has been heard making threats to steal the trophy. Mikayla was seen at a basketball game at the Jefferson Middle School campus last night. Mikayla is notorious for always chewing pink bubble gum and blowing huge bubbles.

3. COACH CHIP MCGEE

- · Athletic director and head football coach at Jefferson Middle School.
- **MOTIVE:** Coach McGee is upset that the Academic All-State Trophy replaced his Football District Championship Trophy from 2 years ago in the trophy case.
- OTHER IMPORTANT INFORMATION: Coach McGee believes football is the most important tradition on campus. He has been caught several times by Principal Butler moving the Academic All-State Trophy to the bottom shelf of the trophy case and putting the football trophy back on the top shelf. Coach McGee was seen rolling his eyes at Principal Butler when Principal Butler told him that all competition teams academic and athletic deserve to be recognized and celebrated. Coach McGee has access to the trophy case keys.





Keep in mind these are our initial suspects. The perpetrator could always be someone else.

Known samples were taken from these individuals for comparison to the crime scene evidence. This includes suspect statements (alibis), 10-print cards, handwriting samples, impressions of their shoes, and buccal swabs for DNA profiles.

NOTES FOR TEACHERS:

- · Make sure students are documenting their analysis and are able to justify their conclusions.
- You can change the script to reflect your school, principal, etc. You can also set-up a crime scene that matches the information provided and have students process the scene: narratives, photographs, placard placement, packaging, etc.

RESULTS OF ANALYSIS - REPORT

After analyzing the evidence and comparing it to the known samples, record your results below and justify your answers. Make sure your justifications use the information from the forensic science lessons you previously completed.

The latent print lifted from the glass of the trophy case was identified to: SUSPECT: FINGER: RICHT OR LEFT HAND: JUSTIFICATION: HANDWRITING EVIDENCE The handwriting from the note left at crime scene is consistent with (suspect's name) handwriting. Justification:





DNA EVIDENCE				
The DNA collected fror	n the bubble gum found at the crin	ne scene was identifie	d to:	
SUSPECT:	NI MANAGEMENT		CARL CAR	
JUSTIFICATION:	Salar Salar and Park			
4	To the work of the last			S. C.
, "	A PR TO THE PARTY OF THE PARTY			3
.44	THE PROPERTY OF	The state of the s		
	W.			3.
	A PARTY OF THE PAR			
257				2.72
3	S. Commission United			
3 5 5			7 7 7 7	
SHOE IMPRESSION EV	IDENCE			
The shoe impression le	t in paint at the crime scene had c	haracteristics consiste	nt with	
	(suspec	ct's name) shoe.		
JUSTIFICATION:				
35.7.75				
77153				
13423				
725610				
37 1 4 2 3 4				
4.7.71				3.
7.713				
FORS				9.)
BASED ON YOUR ANAI	YSIS OF ALL THE EVIDENCE, WHO	O DO YOU THINK STO	OLE THE TROPHY?	
	TOTALL THE EVIDENCE, WITC	JUD TOO THINK STO	A control in	
PERPETRATOR:		The state of the s	L-Carp.	







SUPPLEMENTAL REPORT - CRIME SCENE NARRATIVE

LOCATION: Jefferson Middle School gymnasium

OFFENSE: Burglary - Stolen Trophy

CRIME SCENE INVESTIGATOR: Jeremiah Johnson

CASE NUMBER: 23-156

FORENSIC KIT

DATE: January 27, 2023, Friday

TIME: 8:20 am

CRIME SCENE DETAILS

Jefferson Middle School gymnasium is a rectangular brick building. Inside the building are the coaches' offices (south part of building), the trophy room (middle part of building), and the basketball/volleyball gym (north part of building).

There are no people at the scene except for Principal Butler and Officer Miller (the school resource officer). No witnesses or other persons in vicinity of scene. No cars observed in the parking lot. The exterior building lights and parking lot lights are off. The weather is sunny – no rain or snow – and 37 degrees Fahrenheit.

The west side of the building has two (2) exterior doors leading to the trophy room. The north and south side of building also have exterior doors (1 door on each side). There are also two windows on the west side of the building.

There is no sign of forced entry. Video surveillance in the gymnasium and surrounding parking lot are not operational.

Lights are on (10 fluorescent ceiling lights) and northwest door is unlocked. Principal Butler says that he unlocked the northwest door and turned the lights on when he entered the gymnasium. The interior temperature is 73 degrees Fahrenheit. All other exterior doors and windows are closed and locked. The interior doors leading to the basketball/volleyball gym and coaches' offices are also locked.

In the middle of the trophy room is a floor insignia that says "Jefferson Tigers" and includes images of a basketball, a football, a baseball, and tiger paws. The insignia is black and orange.

A spirit week poster that says, "GO TIGERS" is observed in the southeast corner of the trophy room. The writing is slightly smeared, and 2-dimensional footprints are on the sign in what appears to be black paint from the poster.

A series of footprints (1 set on the poster, 6 sets on the floor – 14 total) are observed. The footprints are 2-dimensional and made in a black substance (appears to be paint from the spirit week poster). The footprints start at the poster and travel north, turning toward the trophies when in front of the trophy case, and then walk away from the trophy case toward the northwest doors. The footprints fade slightly as they approach the northwest doors. Photographs of footprints will be taken for analysis.

The trophy case has a sliding glass door that is ajar. The trophy case lights are turned on. Twenty-one awards and trophies are in the trophy case and appear undisturbed. There are three shelves in the case. The case runs the length of the room on the east wall. There is an empty spot in the trophy case on the top shelf about halfway down. Principal Butler says this was the location of the Academic All State Trophy that has gone missing. No dust is observed on any of the shelves.

A note is observed near the empty space on the trophy case shelf. The note is written on a white piece of lined notebook paper. The paper appears to be a fragment torn from a whole piece of paper. On the paper is written the following message "You'll never get the trophy back. You didn't deserve it anyway." This will be collected for handwriting analysis. No indented writing is observed on the paper.





The lock on the trophy case is located at the south end of the case. The inside of the lock has a soft, pink, sticky substance deposited in it – possibly bubble gum. Indentations that are similar to bite marks are observed in the substance. The substance appears to have prevented the lock from latching. The pink substance will be collected for possible DNA analysis.

No fingerprints are observed. The trophy case, door, light switch, and paper will be processed for possible prints.

No hairs or fibers or other transient evidence is observed.

See crime scene diagram.

OKLAHOMA CITY NATIONAL MEMORIAL MUSEUM

FORENSIC KIT

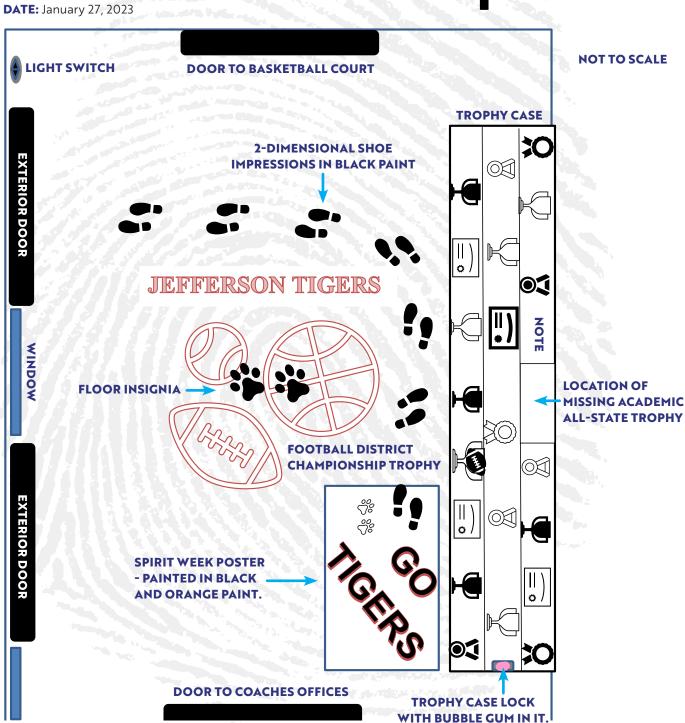
GYM PARKING LOT

Memorial Museum.com

CRIME SCENE DIAGRAM CASE: 23 -156

OFFENSE: Burglary – Stolen Trophy

LOCATION: Jefferson Middle School Gymnasium **CRIME SCENE PROCESSOR:** Jeremiah Johnson





FORENSIC KIT -

Memorial Museum.com

LATENT FINGERPRINT EVIDENCE

- Latent print lifted from the glass door of the trophy case.
- · Location: Gymnasium, Jefferson Middle School
- · Processing techniques: Black powder; lifting tape.



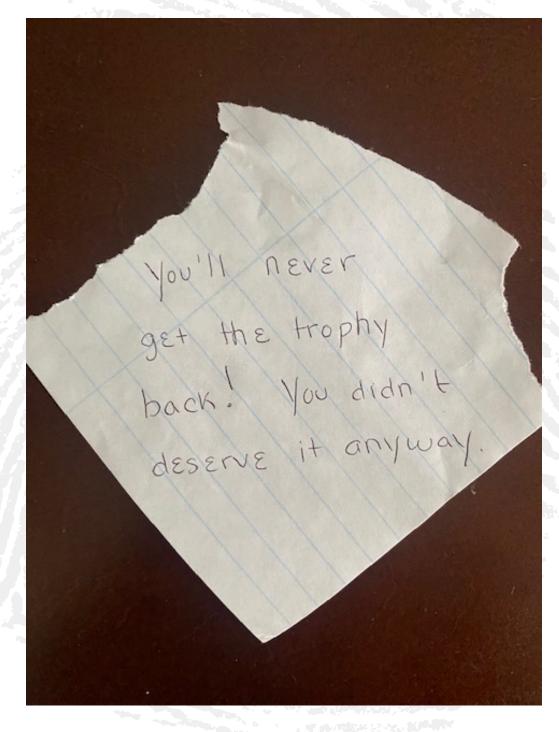


Memorial Museum.com

HANDWRITING EVIDENCE

FORENSIC KIT

• Note left in trophy case.



FORENSIC KIT

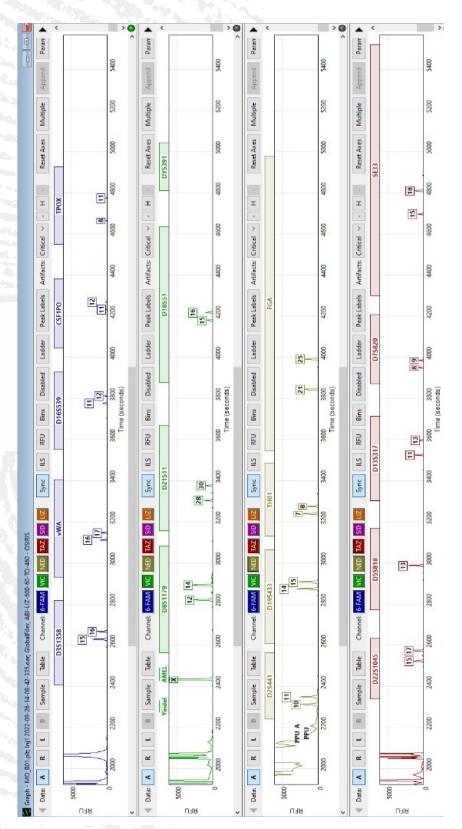


MemorialMuseum.com

DNA EVIDENCE

- DNA swab taken from pink, chewed bubble gum.
- Gum was collected from the lock of the trophy case.







FORENSIC KIT

MemorialMuseum.com

SHOE IMPRESSION

- $\boldsymbol{\cdot}$ One of the shoe impressions left in paint on the gymnasium floor.
- Paint appears to be from the spirit poster.





Memorial Museum.com

KNOWNS FROM SUSPECTS



SUSPECT ALIBIS

FORENSIC KIT -

JAMIE PORTER: Jamie says she is President of the French Club and that they had a meeting after school Friday from 3:00 pm – 4:00 pm. Following the meeting, her and three of her friends from French Club went to the Diner across the street from the school and had milkshakes. This is where her mom picked her up at 5:00 pm. Jamie said the paint on her backpack is from a project she did at home the weekend before. She has several witnesses who justify her whereabouts, and she provides a receipt from the Diner with a time stamp of 4:53 pm.

MIKAYLA JORDAN: Mikayla says she went home on the bus afterschool from Washington Middle School. She then got a ride from her older brother to the basketball game at Jefferson Middle School and was there from 6:00 pm – 8:30 pm. Several of her friends attend Jefferson and she wanted to hang out with them. She claims she didn't even know the trophy was in the gym and wouldn't have any idea how to even get access to it. "Plus, how stupid to steal a trophy – who would do that!" She has several friends who can verify they were with her at the game and her older brother indicates he did in fact pick her up at 8:30 pm.

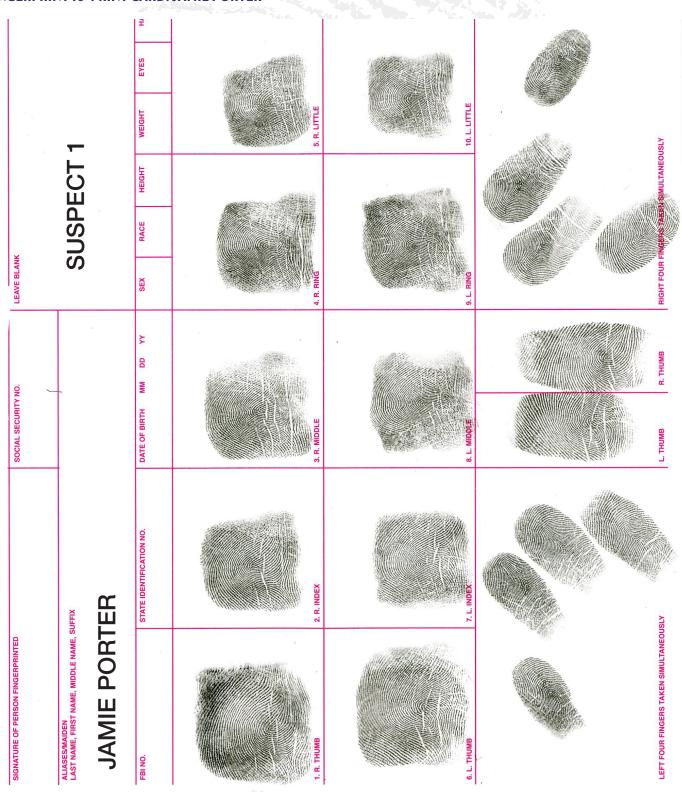
COACH CHIP MCGEE: Coach McGee is extremely upset that he is a considered a suspect and insists he would never behave in such an unprofessional manner. He claims that he had Spring football conditioning afterschool with his players from 3:00 pm – 5:30 pm. He then went home and ate a TV dinner while watching film and revising plays. "Can never be too prepared for next season!" Several other coaches and 20 of his players can verify he was at conditioning practice until 5:30 pm. No one can account for his whereabouts after 5:30 pm as Coach McGee lives alone.



FORENSIC KIT

MemorialMuseum.com

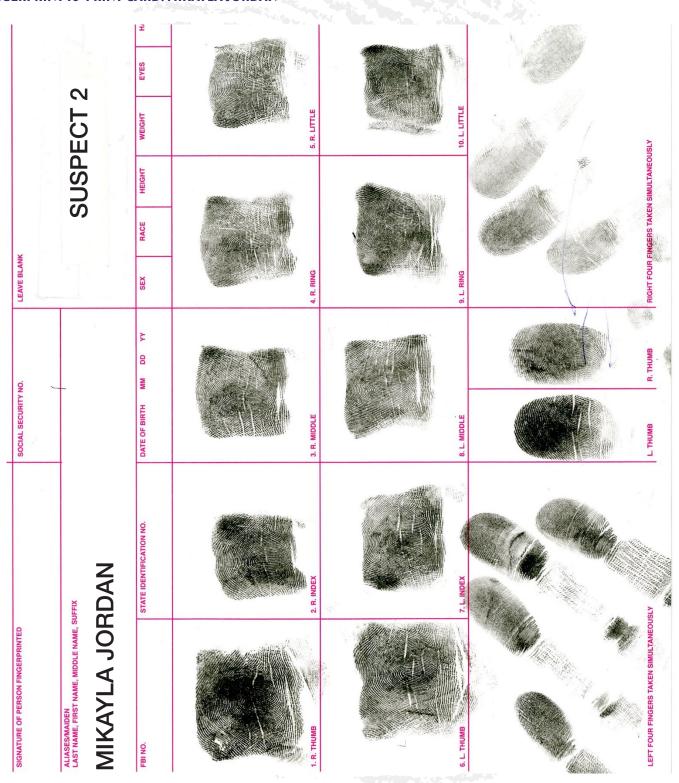
FINGERPRINT 10-PRINT CARD: JAMIE PORTER





MemorialMuseum.com

FINGERPRINT 10-PRINT CARD: MIKAYLA JORDAN

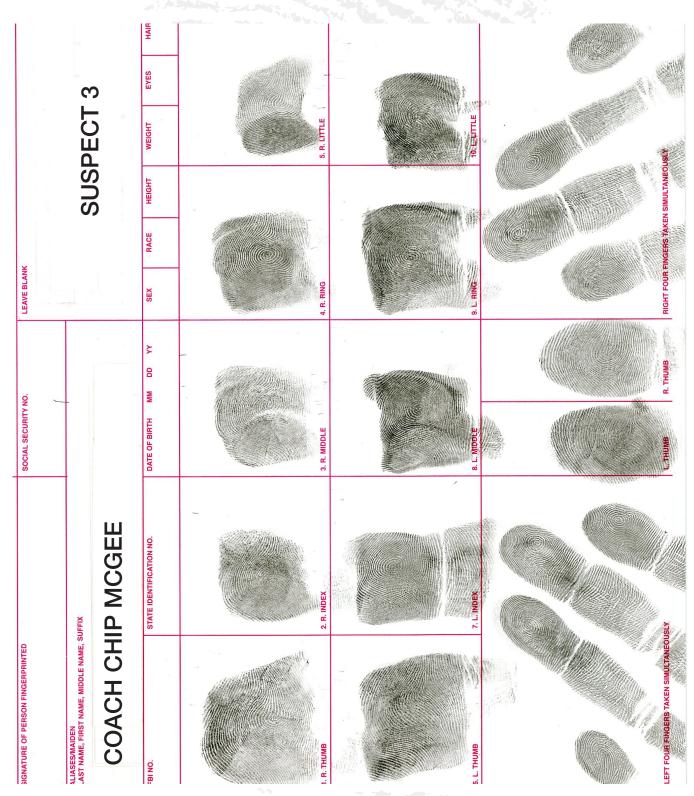




FORENSIC KIT

MemorialMuseum.com

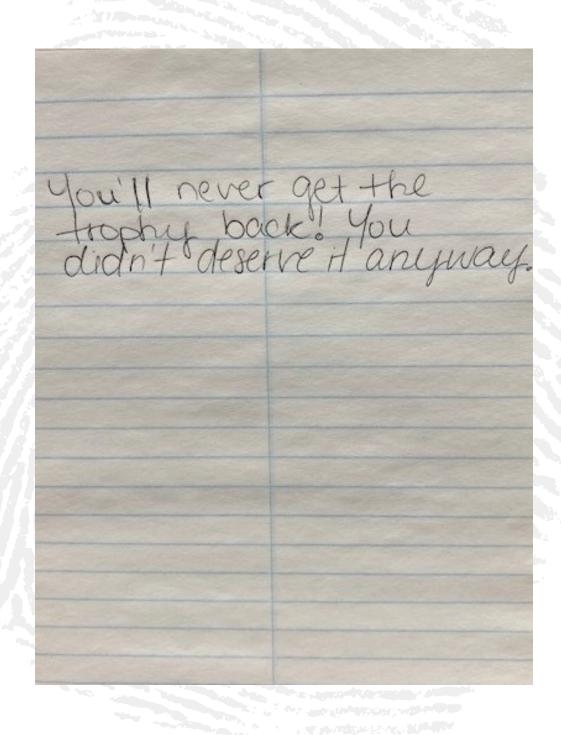
FINGERPRINT 10-PRINT CARD: COACH CHIP MCGEE





MemorialMuseum.com

HANDWRITING SAMPLE: JAMIE PORTER

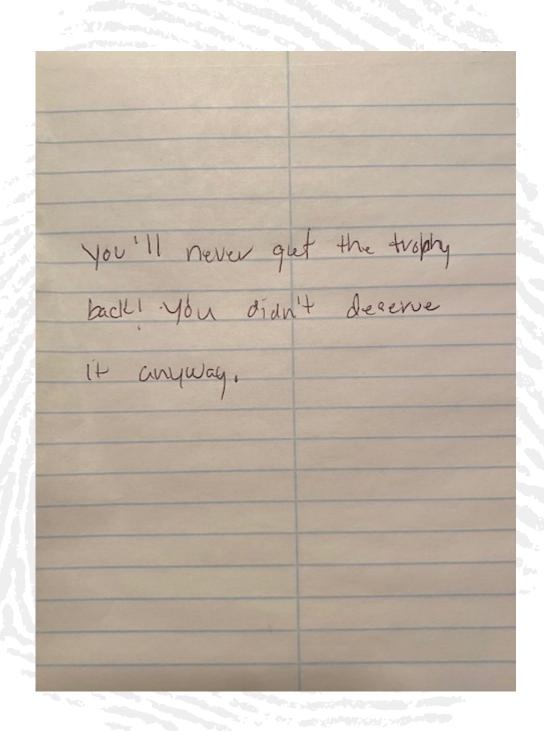


EVIDENCE



Memorial Museum.com

HANDWRITING SAMPLE: COACH CHIP MCGEE

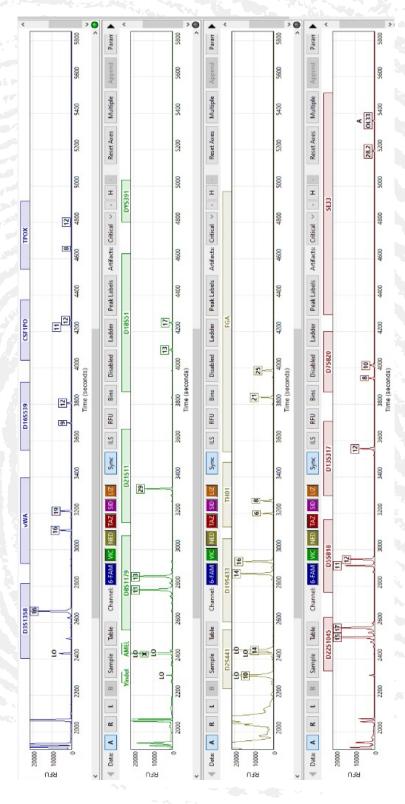




FORENSIC KIT

Memorial Museum.com

DNA PROFILE: JAMIE PORTER

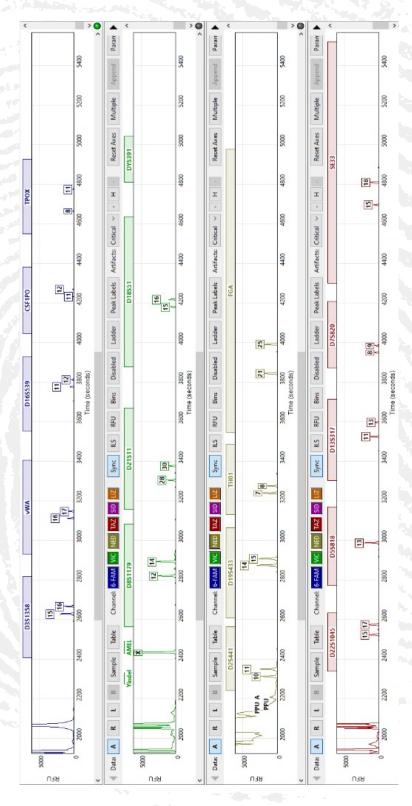




FORENSIC KIT

Memorial Museum.com

DNA PROFILE: MIKAYLA JORDAN



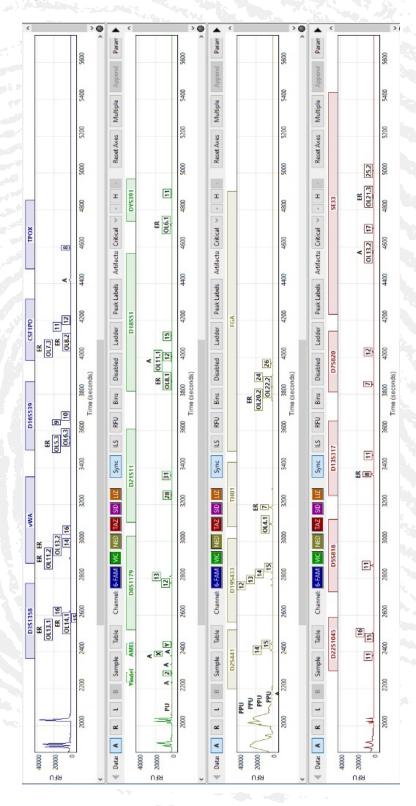
20



FORENSIC KIT

Memorial Museum.com

DNA PROFILE: COACH CHIP MCGEE



FOLLOWING THE TRAIL OF

EVIDENCE



FORENSIC KIT-

MemorialMuseum.com

SHOE - BLACK BOOT - JAMIE PORTER

- Several witnesses indicated that Jamie was wearing black boots on Friday at school. These shoes were confiscated from Jamie and taken to the lab for comparison to the shoe impressions discovered in paint on the gymnasium floor.
- Included below is a picture of the shoe outsole of Jamie's right black boot as well as an inked impression of the boot outsole.



EVIDENCE

OKLAHOMA CITY
NATIONAL
MEMORIAL
MILS FILM

Memorial Museum.com

SHOE IMPRESSION - BLACK BOOT - JAMIE PORTER



FOLLOWING THE TRAIL OF

EVIDENCE



FORENSIC KIT -

MemorialMuseum.com

SHOE - CONVERSE ALL-STARS TENNIS SHOES- MIKAYLA JORDAN

- Mikayla was seen wearing blue/green converse at the basketball game on Friday evening. These shoes were confiscated from Mikayla and taken to the lab for comparison to the shoe impressions discovered in paint on the gymnasium floor.
- Included below is a picture of the shoe outsole of Mikayla's right converse tennis shoe as well as an inked impression of the shoe outsole.



EVIDENCE



Memorial Museum.com

SHOE IMPRESSION - CONVERSE ALL-STARS TENNIS SHOES - MIKAYLA JORDAN



FOLLOWING THE TRAIL OF

EVIDENCE



FORENSIC KIT-

Memorial Museum.com

SHOE - ADIDAS TENNIS SHOES - COACH CHIP MCGEE

- Coach McGee's players state that Coach has worn his white Adidas at every practice this year. These shoes were confiscated from Coach McGee and taken to the lab for comparison to the shoe impressions discovered in paint on the gymnasium floor.
- Included below is a picture of the shoe outsole of Coach McGee's right Adidas tennis shoe as well as an impression of the outsole of the shoe.

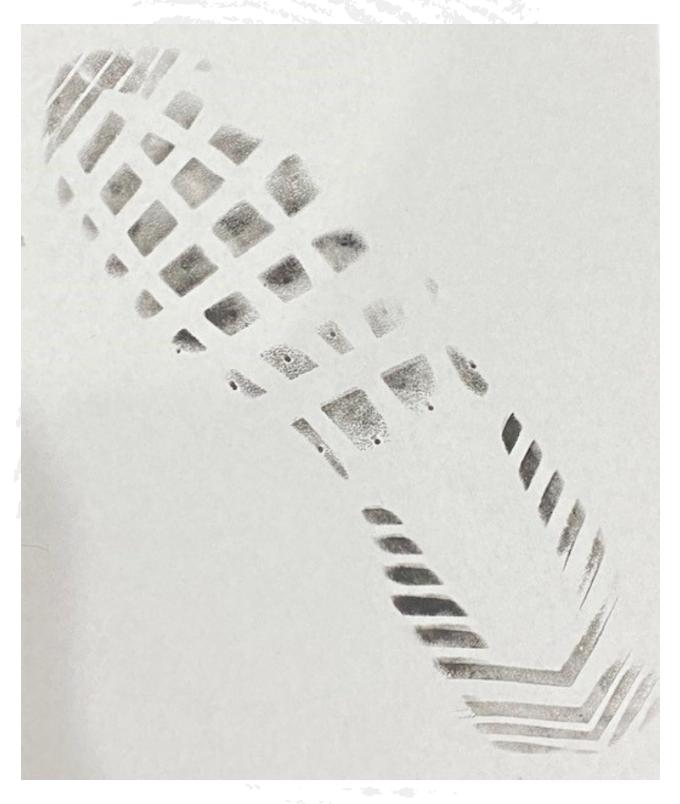


EVIDENCE



Memorial Museum.com

SHOE IMPRESSION - ADIDAS TENNIS SHOES - COACH CHIP MCGEE





RESULTS OF ANALYSIS - REPORT

KFY

After analyzing the evidence and comparing it to the known samples, record your results below and justify your answers. Make sure your justifications use the information from the forensic science lessons you previously completed.

LATENT FINGERPRINT EVIDENCE

The latent print lifted from the glass of the trophy case was identified to:

SUSPECT: Mikayla Jordan

FINGER: Left Thumb (#6)

RIGHT OR LEFT HAND: Left

JUSTIFICATION: Students should discuss Level 1 and 2 detail to include a description of pattern type and Galton features.

EXAMPLE: Level 1 Detail: Both the known and the unknown were double loop whorls and exhibited creases in the same locations. Level 2 Detail: 4 bifurcations, 3 enclosures, and 8 ending edges were used to make an identification.

TEACHER HINT: Level 2 detail will vary depending on what the students labeled. Students should label the known and unknown prints during their analysis.

HANDWRITING EVIDENCE

The handwriting from the note left at crime scene is consistent with Mikayla Jordan's handwriting.

JUSTIFICATION: Students should discuss some of the class and individual characteristics they used to make the identification.

EXAMPLE: The "e" appears to be a backward 3. The "y" is two lines that do not always connect and are not rounded at the bottom. The "h" appears to be made in a continuous motion – no spacing or evidence of pen lifts.

TEACHER HINT: Student answers will vary depending on what features they used to make the identification.

DNA EVIDENCE

The DNA collected from the bubble gum found at the crime scene was identified to:

SUSPECT: Mikayla Jordan

JUSTIFICATION: Students should indicate that the numbers associated with each peak on the evidence electropherogram are consistent with the peaks on Mikayla's profile. Students might also mention that the evidence profile has an X, X at the amelogenin peak indicating a perpetrator who is biologically a female.



SHOE IMPRESSION EVIDENCE

FORENSIC KIT -

The shoe impression left in paint at the crime scene had characteristics consistent with Mikayla Jordan's converse tennis shoe.

JUSTIFICATION: Students should describe the class and individual characteristics that are consistent between the shoe impression from the crime scene and the outsole of Mikayla's shoe.

EXAMPLE: Class characteristics: square pattern, Converse brand, shape, open space in middle, x on the bottom, diagonal lines. Individual characteristics: wear on heal, circular indentation in heel.

TEACHER HINT: Student answers will vary based on what characteristics they observed and recorded.

BASED ON YOUR ANALYSIS OF ALL THE EVIDENCE, WHO DO YOU THINK STOLE THE TROPHY?

PERPETRATOR: Mikayla Jordan



OTHER RESOURCES

FORENSIC KIT

BETTER CONVERSATIONS:

- 1. How does Forensic Science help our society?
- 2. What does the future of Forensic Science look like to you? Get as creative as you can!
- **3.** Discuss the importance of integrity and honor in the field of Forensic Science and how those tie into the Oklahoma Standard.
- 4. If you could have any superpower what would it be and why?
- **5.** How does your generation respond to injustice?
- 6. What can each of us do to make our communities safer for everyone?
- 7. What is one thing you would like to learn more about in Forensics?
- **8.** Forensic specialists have to be as unbiased as they possibly can be when working a case. Why is this? Do you think it is a good method to practice when learning new things and meeting new people?
- **9.** Do you think it is important for forensic scientists to have mental health as a high priority? What resources need to be available and why?

FORENSIC SCIENCE AND MYSTERY BOOK RECOMMENDATIONS:

- The Lil Super Snoopers Club Steve Jefferson
- Club CSI David Lewman
- THE DNA DETECTIVES: The Smugglers Daughter Dr. Mandy Hartley
- Mystery of the School on Fire Ravi Subramanian
- VANISHED IN VISTA POINT: A Forensic 411 Mystery Whitney Skeen and Lambert Twyla Beth)
- Sleuth and Solve 20+ Mind-Twisting Mysteries
- SCENE OF THE CRIME: A Forensic Mystery Where You Crack the Case Malcolm Rose and Dave Hill
- THE CRIME CLUB: Mystery and Mayhem Twelve Deliciously Intriguing Mysteries
- CRIME FILES: Four Minute Forensic Mysteries Jeremy Brown
- AGGIE MORTON MYSTERY QUEEN: The Dead Man in the Garden Marthe Jocelyn
- Detective Science Jim Wiese
- CRIME SCENE INVESTIGATIONS: Real-Life Science Activities for the Elementary Grades Pam Walker & Elaine Wood



Crime Scene Field Notes		Case Number	Page	1	of	3
Offense	Burglary	23 -156	Location	Jefferson Middle School		dle School

DATE: January 27, 2023 DAY: Friday TIM	ME NOTIFIED: 7:47 am
	OFFICER ON SCENE Officer Debra Miller - School Resource Of
FEAM MEMBERS ON SCENE: Crime Scene Investigator: Jeren	miah Johnson
EGAL AUTHORITY:	
PERIMETER ASSESSMENT: No witnesses or other persons in were not operational. No other incidents or disturbances reported	
banners, and shoe impressions. Entrances/exits and light swithces	; will be assessed for possible prints and other evidence.
No transient eviden	oce initially noted
TRANSIENT EVIDENCE EVALUATION: No transient evidence	Ce initiany notes
MARIE I LARES	
BRIEFING FROM FIRST RESPONDING OFFICER: Officer She arrived on scene at 7:38 am - after being contacted by Principa	
were on, but that Principal Butler said he had turned them on. Pri locked when he arrived, but the trophy case was open. Principal Bu	incipal Butler also mentioned that the doors were
State trophy had been taken from the trophy case. Officer Miller s impressions in black ink leading away from the trophy case, pink bu	
and a hand written note scribbled on a piece of torn notebook pape perimeter. Principal Butler had suggested several potential perpeti	
Jamie Porter, Mikayla Jordan, and Coach Chip McGee.	
THE THE THE THE THE THE THE	The second second
	The state of the s
TEMPERATURE, LIGHTING, & WEATHER DATA: Indoor Building temperature: 73 degrees	scene - Jefferson Middle School gymnasium
Lighting: 10 fluorescent ceiling lights - turned on by Principal Butler	
Weather: sunny; no rain or snow; 37 degrees outside (may not be p	pertinent as scene is inside)
REPORTING INVESTIGATOR SIGNATURE	DATE
Jeremiah Johnson	January 27, 2023



Crime Scene Field Notes		Case Number	Page	2	of	3
Offense	Burglary	23 -156	Location	Jefferson Middle Schoo		dle School

ckaging materials needed, etc. Processing and packaging materials - paper l	bags, evidence tape, placards, DNA swab box,
erprint powder and kit, tweezers	
A STATE OF THE STA	
The state of the s	
ALTH AND SAFETY HAZARDS: No health and safety hazards noted.	. Personal Protective Equipment used: gloves
A STATE OF THE STA	
	The state of the s
NE DESCRIPTON: See supplemental report - Crime Scene Narrative	
HUBERING CUANDAN	
	THE STATE OF THE S
	The state of the s
ORTING INVESTIGATOR SIGNATURE	DATE
PORTING INVESTIGATOR SIGNATURE eremiah Johnson	DATE January 27, 2023



Crime Scene Field Notes		Case Number	Page	3 от 3
ffense	Burglary	23 -156	Location	Jefferson Middle Sch
. 4	The second of the second		The Page	
				1
	The same of the same of			
100	A PORT OF THE PROPERTY OF THE			
3.7	THE RESERVE THE PARTY OF THE PA			
	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
181				
	ATTIC SILVE	TIN I E T		TON THE
CONTA	AMINATION CONTROL PROCEDUR	RES:		
	worn and changed during evidence collect ontrol log maintained to monitor who ent			
				STORY OF THE STATE OF

REPORTING INVESTIGATOR SIGNATURE	DATE
Jeremiah Johnson	January 27, 2023