

## CASE THREE: BURNING STAR

### Grissom's Office

- Click on Grissom to have a conversation with him.
  1. How can I help? PDA and field kit will be needed.

### Locations - Crime Scene

- Talk to Nick.
  1. What happened here? 2 teenagers found a burned out car with a body.
  2. Where is the body? Sent it to the morgue w/ Dr. Robbins
  3. How do I open a locked car? Look for keys to open the trunk and glove box.
  4. What should I do with the footprints in the sand?
    - a) Ignore the animal prints
    - b) USE the casting mix in kit to make an impression.
- Find keys from the front seat in the car. Click on keys. To open Glove box drag keys from the evidence section and place it over the glove box.
- Use the keys to open the trunk and collect the Empty Liquor Bottle.
  5. Are we finished? More evidence
  6. What is in the glove box? A road atlas
  7. What is in the trunk? A bottle
  8. What three pieces of evidence could be found?

Evidence	How is it processed in lab
Keys	
Bottle	
Footprint	

- Use Casting Mix (under TOOLS) to collect shoeprint on the sand.
  9. What are the steps involved in casting a print?
    - a) Spray with hairspray
    - b) Water in the bowl with the casting mix
    - c) Stir and then pour into the area
    - d) Let it set
    - e) Remove cast and take it
- Click on NICK. Are we finished? Go to Headquarters.

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## **At headquarters scan the labs using the mouse and find the entrance to the morgue.**

### **The Morgue (first visit)**

- Talk to Dr. Robbins. At the end of the dialogues, you'll get the Victim's Blood as one piece of evidence.
  1. Have you finished the autopsy? Yes
  2. Who is the victim? Sex: female  
Approximate Age: 20 – 25 Weight: 115 lbs Height: 5'5"
  3. How was the victim identified? DNA from bone marrow
  4. What two other pieces of evidence could help identify the victim?
    - a. Blood DNA – CODIS or Missing persons
    - b. Teeth – dental x-rays and comparisons
  5. How long had she ago did she die? 2 – 3 days
  6. Did anything else happen to her? The animals had started eating her
  7. Doc, do we have a cause of death? She has a stab wound to the breast puncturing the heart.
  8. Do we have an idea about the weapon used? No, but it was approximately 5 inches long with striations. You will need to make a wound impression.
- **Use the Impression Gel to collect the Stab Wound Impression from the victim. To leave morgue click the hallway exit on the far right**

### **The Lab (first visit)**

#### **Catherine Willows will assist you.**

1. How do I process the evidence? Drag it to the appropriate machine to test it.
  2. Could you tell me about the equipment? Use the mouse to scan machines to get a basic description and location.
    - a) DNA – hair, blood, spit, sweat – CODIS
    - b) Fingerprint – powders and chemicals check in IAFIS
    - c) Digital Forensics station – data base search, computer or flash drives – makes a copy
    - d) Light Table – analyzing and comparing large evidence – shoe prints.
    - e) Tool Mark impressions- then compare it under microscope.
- **You need to analyze two pieces of evidence during this visit in the Lab. Click and then drag the evidence to an appropriate station (when the evidence glows yellow, it means you can analyze that evidence there) and follow the instructions to complete the analysis.**

- **Liquor Bottle - fingerprint station.**

3. What are the steps in collecting fingerprints from the bottle?
  - a. Place the bottle in the fume hood
  - b. Add super glue to the tray
  - c. Turn on the heat source
  - d. Place the tray in the chamber and close the chamber

- **Identify the fingerprint**

4. What fingerprint characteristic is seen on the print from the bottle? Loop
5. What do you use to identify the print? IAFIS
6. Who does the print belong to? Maury Wan
7. How did is print get into the system? Pre-employment background check
8. Where does he live? 1589 Avenue A Las Vegas

- **Victim's DNA - DNA station.**

9. Was there a match in CODIS? No
10. What are you going to do next? Visit Dr. Robbins.

- **Exit the lab and go to the morgue**

### **The Morgue (second visit)**

- **Talk to Dr. Robbins first.**

1. Have you had any luck identifying the girl? I could not find a DNA match.
2. What did the x-ray show you? Nothing abnormal, so no information there
3. Is there another technique for identifying the body? Facial Reconstruction
4. What is Facial reconstruction? It is a mix of Forensic Anthropology, Anatomy, and Artistry.
5. How do I do a Facial reconstruction? Ask the expert
6. Who is the Expert? Taylor Wilkinson.

- **Click on Wilkinson to start dialogues and facial reconstruction activity.**

7. What is the first step? Boiling the skull
8. What basic information is needed?

Sex= \_\_\_\_\_ How old? \_\_\_\_\_

Racial background? \_\_\_\_\_

9. What are the steps involved in a facial reconstruction?
  - A. Add tissue depth markers
  - B. Attach muscles and glands to the face
  - C. Add skin features.

10. What affects tissue depth markers? Age, Sex, and race
11. How many will be used? 33
12. How can we tell skin features
  - a. Deduce from bone structure
  - b. Teeth height tells thickness of the lips
  - c. Width of the eye sockets tells about the eye lids and eyebrows.
13. What is the most common eye color? Brown
14. What should you be alert about? Eye color and hair color
- **To show a photograph click on the icon in the evidence section then click on the person you want to show the photograph to.**

#### **Agent's office (first visit)**

1. Who will assist you? Agent Stokes
2. What do we need to search the area? A warrant unless you have permission
3. What does Wan want? Proof
- **Talk to Wan. The agent is not cooperative this time, but dialogues with him will trigger the message from Grissom to unlock another location.**
4. Who is Wan? Talent agent
5. Wan asks you, "What is this about?" Investigating the murder of a Jan Doe in the desert.
6. Would he mind if you looked around? No
- **Message**
7. What does the message say? 21 year old missing that fits description.

#### **Reynolds's House (first visit)**

1. When you drive up what is unusual about the Truck in the drive way? Broken window.
2. Click on the broken window. What is in the front seat? A knife
- **Click on the front door**
3. Why does Mrs. Sallie Reynolds think that you are there for? Her missing daughter
4. When was the last time she saw her? 2 days ago when she sang at her concert.
5. Who was Lawrence? Boyfriend
6. Would anyone want to harm done? No
- **Show the reconstruction picture to Mrs. Reynolds.**
7. What did she say? It looked like her daughter but the eyes and hair color are wrong.
8. Can I have a DNA sample? Yes
- **Collect a cheek swab from Mrs. Reynolds.**

9. How much of a DNA match should there be between mother and daughter? 50%

- **Interview Lawrence**

10. When was the last time you saw her? 2 days ago

11. What happened? We split up because she was acting strange through dinner.

12. How strange? Nervous and on edge.

13. Is there anyone who would want to hurt her? No, but I never liked her agent.

- **Show Lawrence the picture.**

14. What does he think about the picture? He can't be sure

15. What other evidence can you get from the table? Diary

16. What does it say? She was planning a break up

- **Look in the trash can**

17. What are 4 pieces of paper found in the trash can?

a. Shopping list

b. New agency letter

c. Receipt

d. Remember to call mom

18. What two clues were in the trash can?

a) Letter to fire her agent

b) Receipt saying she had dinner with someone

19. What else can be checked? The computer for emails.

### **The Lab in headquarters (second visit)**

- You need to analyze four pieces of evidence during this visit in the Lab.

Evidence

Processed

Computer	
Sally R. DNA	
Hunting Knife impression	
Hunting knife fingerprint	

- **Run a DNA family comparison on the DNA from Sallie Reynolds.**

1. What did you learn from the DNA profiles? Sallie Reynolds was her mother

2. How many markers are identical? 50% of them

3. Where does the other 50% come from? The father

4. The victim was? Freebird Reynolds
- **Process the knife. First at the fingerprint station then the comparison microscope.**
  5. At the fingerprint station, collect a fingerprint, was there a match? no
  6. How do you compare the knife? Tool mark impression from the wound compared to the knife
  7. What station was used? Comparison Microscope
  8. What of evidence was collected from the knife?
    - a. Fingerprint
    - b. Striation patterns
  9. What was a match between the wound impression and the knife impression? The striations between the two matched.
- **Process the computer.**
  10. What happens at the Digital Forensics Station?
    - a. An exact copy of digital evidence is made
    - b. Analyze evidence to see activity on computer
  11. What are the steps involved?
    - a. Copy of Hard Drive
    - b. Examine emails
    - c. Examine recently altered files
    - d. Examine deleted files
  12. Why do you image the hard drive? To create a complete digital copy of the evidence.
  13. What did you look at? Emails, recently modified documents, and deleted files
  14. What was unusual about the emails? NO 1 fan email
  15. What does Brass want? Fingerprints at the scene, and search warrant has been given.

#### **Agent's office (second visit)**

- **Talk to Wan**
  1. What do you want? To talk about Freebird Reynolds, she is dead.
  2. Who does he think could hurt her? Her boyfriend
  3. Why were his fingerprints on the bottle? She did not drink so he planted the bottle
  4. Can you look around? Yes
- **Ask Maury Wan's permission to search the room and collect his shoes (evidence).**
- **Click on Freebird's poster on the wall.**
  5. What does it tell you? A concert happened the night she died
- **Click on the desk to look into the drawer.**
  6. What was in the desk drawer? A life insurance policy claim on Freebird Reynolds

### Reynolds's House (second visit)

- **Talk to Lawrence (if you get a swab from the tools and carry over to Lawrence it will start the next conversation)**
  1. Who owns the vehicle out front? Lawrence does
  2. There was a hunting knife inside, was it yours? No not his
  3. Did you know that that a window was broken on your vehicle? No, it was not broken when he came into the house.
  4. Can I have your fingerprints and a pair of your shoes? No problem.
- **Brass contacts you**
  5. What does Brass want? The No1 fan is Gabriel Tam

### Tam's Apartment

- **Talk to Nick Stokes**
  1. Can I search the apartment? Ask permission
  2. What do I need? A warrant or permission form Tam.
  3. How can I show that Tam is the #1Fan? Ask him then see if there is evidence in the computer.
  4. How can I collect the shoes? See if you can find them.
  5. Are you finished? Talk to Tam
- **Talk to Tam.**
  1. Did you know Freebird Reynolds? Not personally put a fan, I saw her concert.
  2. Do you know who killed Freebird? No, but I saw her and her boyfriend having a fight after the concert.
  3. Did you ever e mail Freebird Reynolds? No, I liked her music.
  4. Can I check your computer? Sure
  5. Why did they have to be careful? Tam put some personal security on the computer.
  6. Can I look around your apartment? Yes, I have nothing to hide.
  7. I will also need your fingerprints, Can I have them? Yes.
- There are three pieces of evidence to be collected in the apartment.

Evidence	How is it processed in lab
Sword	
Shoes	
Fingerprint	

## The Lab (third visit)

- **Finish analyzing evidence. Examine Tam's shoes**



Place circles where they match.

1. What happened when you examined Tam's shoe? It matched
  2. What characteristics did they look for?
    - a. Shoe size,
    - b. manufacture,
    - c. approximate age
  3. What did you learn from the impression evidence? Tam's shoe was at the crime scene.
  4. How do we know other shoes can't have the same individual characteristics? Usual wear patterns were a match
- **Check out Tam's Fingerprint**
    5. Compare Tam's print? What type of fingerprint characteristics does he have? Whorl
    6. Was it a match? Match to the knife
    7. What did you learn? Tam had handled the knife.
    8. What does the superglue react with? Natural oils left behind by Gabriel's skin.
  - **Check out Tam's knife**
    9. What did you learn about the tool marks? Hunting knife made the wound that killed Freebird Reynolds
    10. What part of the stab wound and hunting knife were identical? Striations left on the material by the blade
    11. What lab equipment did you use? A comparison microscope

- **Examine Tam's computer**

12. What happened when examining Tam's computer? The computer kicks you out and you have to start over.
13. How do you see what is in the trash? Play a game
14. What was he protecting? Saved e mails and Pictures
15. Why did you have to reimage the computer? It was booby-trapped
16. What does it do to the computer? Erased our copy of the hard drive
17. What was it protecting? No1 fan emails

- **Message**

18. What does Grissom want? If the evidence is in, go arrest Tam

### **Interrogation Room**

1. What does Tam say? He made a plea bargain and he killed her.
2. When did he kill her? After the concert
3. Why did he kill her? She insulted and hit him
4. What happened? She hit him with her purse and he had a knife,
5. What did he do after he killed her? he killed her and then had to hide the body.
6. What did you do with the knife? Thought the world would blame the boyfriend since they had a fight
7. Why did you burn the body? To hide the evidence, if you can't identify the body then they would never catch him

Case closed.