

# State Crime Lab

Case Description: Missy Hammond Case

Incident No: 000524-27A-2001



Oxford hair stylist Missy Hammond was found dead in her home. The victim's father, Jonah Dale, discovered the body when Missy's 7-year-old daughter, Liddie, answered the door. It appears that Liddie spent the night in her mother's bed, sleeping next to her mother's body. Initial observations indicate Missy was strangled and had been dead for some time before her body was found.

# Directions

As Crime Scene Investigator, your job is to solve the murder of Missy Hammond. Here is what you need to do.

- 1) View the evidence at mommymurdered.com. The case documents are presented in chronological order in the Case Files section.
  - Click the Evidence, Interview, Biography, or Press tag at the top of the Case Files page to filter by document type.
  - Click the Week tags at the top of the Case Files page to filter case documents by the week they happened in the investigation.
- 2) Perform forensic tests. Test the enclosed fabric samples for blood. Dust an enclosed evidence item for fingerprints and match it with a suspect print. Forensic tests and directions are included.
- 3) Name your suspect. Record your findings on the fact sheet.

# Requirements

- · Forensic tests should be performed by adults wearing protective gear.
- mommymurdered.com requires an internet-capable device with a modern browser

#### **Fingerprint Processing and Preservation**

Fingerprint dusting is the application of finely ground, colored powder to a nonporous object to make latent prints visible. Powder clings to moisture, oil, and other residues. Powder spills are difficult to clean. Use with care under adult supervision.

### Equipment

Soft filament brush

### **Materials and Chemicals**

Fingerprint powder Adhesive fingerprint lifting tape Fingerprint cards

#### **Processing Procedure**

- 1. Pour needed amount of powder into a small pile.
- 2. Dip tips of bristles of brush into powder.
- 3. Apply a small amount of powder onto the surface and begin to brush.
- 4. Brush in the direction of any ridges that begin to appear.
- 5. Build powder onto ridges and stop when latent print reaches point of sufficient clarity.
- 6. Clean excess powder from between ridges using brush or cotton. (Optional)

#### **Preservation Procedure**

Collect and preserve the print by using fingerprint lifting tape.

- 1. Press the adhesive side of the tape over the latent print surface and rub it to make certain complete contact is made.
- 2. Carefully peel the tape from the latent surface.
- 3. Attach to the tape to the glossy side of a fingerprint card. Press carefully to remove bubbles.

# Fingerprint Ridge Characteristics

Ridges are essential to fingerprint pattern identification. Three basic ridge types form recognizable patterns and create a frame of reference when making comparisons.







# **Ridge Identification**



#### Summary

To compare the fingerprint you gathered against the four suspect samples, look for ridge pattern matches. To get a better look at the ridge detail, use a magnifying glass. A camera phone or photocopier may work well in place of a magnifying glass.

The classification and identification of fingerprints is a science covered in depth online and in many books. For more info about identifying fingerprints, visit **mommymurdered.com/resource** 

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### **CSI:** Fingerprint Samples



### **Using a Presumptive Test for Blood**

Evidence at the scene can immediately be field tested for the presence of blood by using a presumptive blood test reagent called Hemastix.

Each Hemastix has a blood reagent at the end that allows them to detect hemoglobin found in blood. A positive result turns green. Note: Positive results are presumptive for human or animal blood.

- 1. Locate the three fabric samples in the evidence packet.
- 2. Remove a fabric sample from its container.
- 3. Obtain a sample from the suspect stain by taking a small cutting or thread.
- 4. Lightly moisten the fabric sample.
- 5. Touch the Hemastix to the moistened fabric with the suspected blood sample on it.
- 6. The reagent coated tip and/or fabric sample will turn a shade of green if hemoglobin is detected. The darker the green the stronger the sample.
- 7. Repeat this with each fabric sample.
- 8. If the reaction is positive, take a photograph of the strip to document the reaction and retain the strip as evidence.

Extra tests are included to allow you to confirm your results or to experiment with unknown stains in your home.

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# **Solving the Case**

Record your findings on the case before opening the solution envelope. In the Solution section you will find forensic test results, a suspect interrogation, and more. Use this information to check your results.

1. The Killer(s) Identity

- 2. Your Blood Evidence Test Results:
- 3. Your Fingerprint Evidence Test Results:

**Refills available:** https://shop.crimescene.com

Use this case in your classroom https://mommymurdered.com/resource