

FOLLOWING THE TRAIL OF
EVIDENCE
FORENSIC KIT



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A large, light gray fingerprint graphic is centered on the page, serving as a background for the main title.

SHOE IMPRESSION EVIDENCE

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SHOEPRINT IMPRESSION EVIDENCE

CLASS CHARACTERISTICS

Class characteristics are features of an item of evidence that can be used to include or exclude it from a group. These characteristics for shoeprint impressions include the shape, size, and design. For example, there are many size 10 Nike Air Jordans made with the same outsole (tread) pattern. If we find this pattern at a crime scene, any suspect shoe with these same characteristics can be included as a possible source. It is important to know that class characteristics alone cannot prove that a particular shoe was worn at a crime scene, but any shoe that does not have these features can be eliminated as the source.



The circular outsole pattern of this impression (left) and shoe (right) are similar, but the middle portion of the shoe has a Nike emblem and square shape that is not present in the impression. Therefore, the shoe can be eliminated as having left the impression.

INDIVIDUAL CHARACTERISTICS

Individual characteristics are defined as markings that are unique and random to an item of evidence. For shoeprint impressions, this usually refers to damage to the outsole caused by normal wear. A shoe regularly worn will have scratches and nicks that vary in location and size. A shoeprint impression recovered from a crime scene can be identified to a particular shoe if enough of these individual characteristics match.



This Reebok shoe has damage from being worn. Some of these individual characteristics have been marked with arrows. A shoeprint impression recovered from a crime scene with these same damaged areas may be identified to this particular Reebok shoe, as long as the class characteristics are also the same.

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SHOEPRINT IMPRESSION EVIDENCE EXERCISE

SCENARIO: A house has been broken into and several items have been taken. It appears the suspect walked through wet paint and left a shoeprint impression on the kitchen floor. A further search of the area reveals a similar shoeprint located in mud outside of the home. A dental stone cast of this impression in mud is collected. There are four suspects in this case and photographs are taken of each of their shoes.

INSTRUCTIONS

1. Examine the two impressions from the crime scene (Unknown #1 & #2). Circle the class characteristics.
2. Repeat this process for each of the suspect shoes (Known #1 – #4).
3. Compare the class characteristics of the Unknowns and Knowns and determine if any of the suspect shoes can be eliminated.
4. Examine the two impressions from the crime scene (Unknown #1 & #2). Draw an arrow to any individual characteristics.
5. Repeat this process for any suspect shoes that could not be eliminated from Step 3.
6. Compare the individual characteristics of the Unknowns and Knowns and determine which suspect shoe is the likely source of the impressions at the scene.

NOTE: It may be helpful to use different colors for the circles and arrows.



LEFT – Impression found on the kitchen floor in paint (Unknown #1).

RIGHT – Cast of impression found outside of the home (Unknown #2).

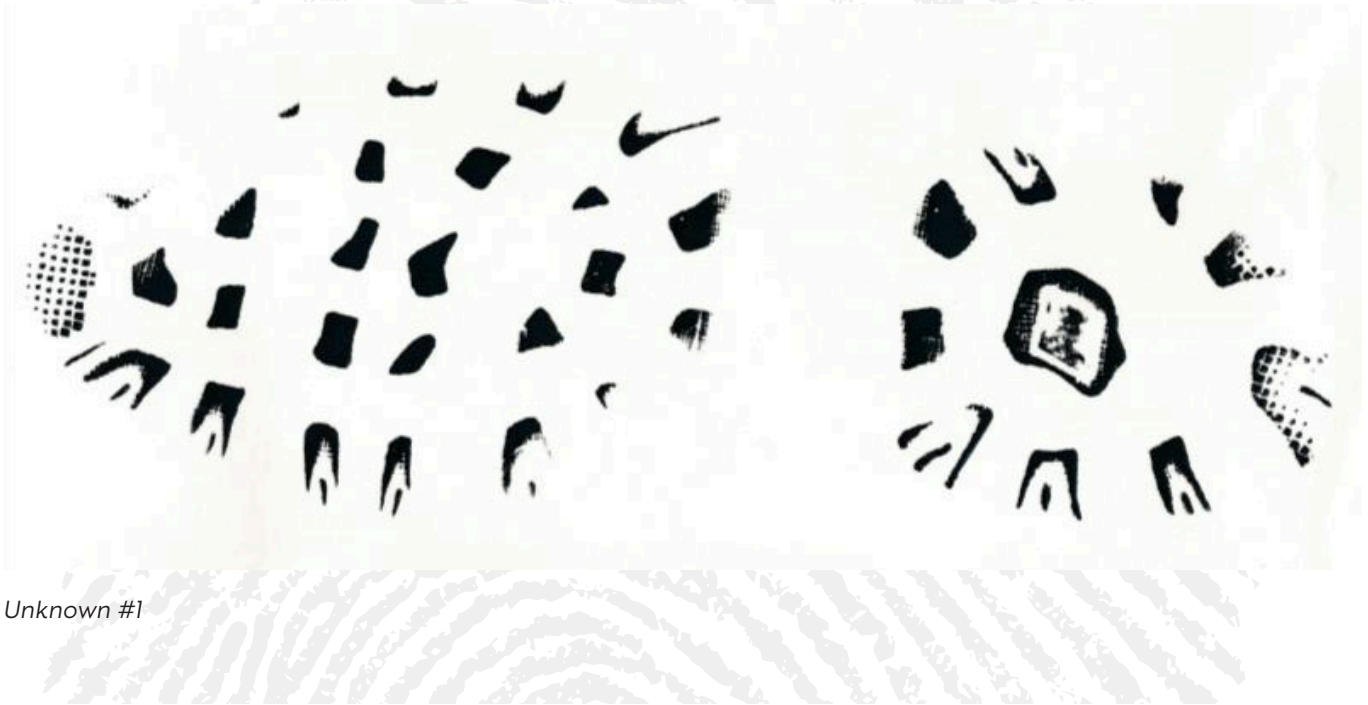
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CRIME SCENE IMPRESSIONS



Unknown #1



Unknown #2

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SUSPECT SHOES



Unknown #1



Unknown #2

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SUSPECT SHOES



Unknown #3



Unknown #4