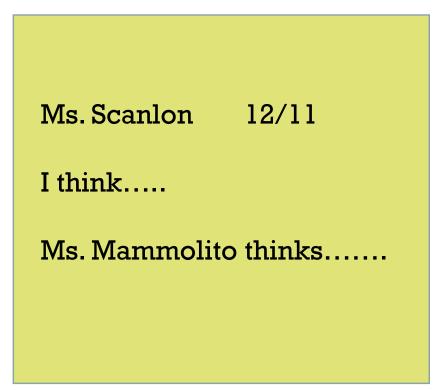
Aim: What is impression evidence and how is it collected?

December 11, 2017

### What is an impression?

- Talk to your neighbor about this question.
  Write down your thought to the question AND your neighbor's.
- Everyone's Post-It Should Have 2 sentences.



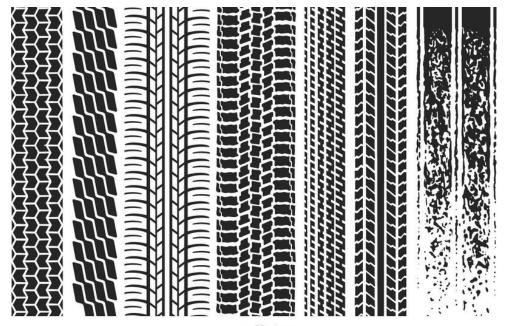
 Impression evidence can be defined as objects or materials that have retained the characteristics of other objects through direct contact.



 Impressions are created when one object is pressed against another material with enough force to leave an impression of the object.



• <u>Shoeprints</u>, tool marks, <u>tire tracks</u>, <u>bite</u> <u>marks</u>, and marks on a fired bullet are several examples of impression evidence.



Designed by Vecteezy

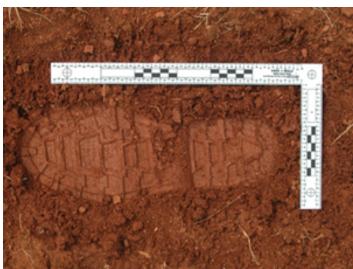
 Impressions may be found in or on many different types of materials. The quality of the impression depends on the <u>object making the</u> <u>impression</u> and the <u>surface conditions</u>, such as how hard or soft it is and what type of material it is (soil, mud, dust, concrete, grass,

skin, etc.)



### How is it Collected?

 Investigators analyze the impression evidence to find unique characteristics to link <u>shoes, tires, tools,</u> and other objects found in a suspect's possession to evidence at a crime scene.



### How is it Collected?

- Collection of impression evidence can be accomplished using several methods:
- 2-D: This type of impression is documented using <u>photography</u>. Some impressions may be dusted with fingerprint powder to be photographed or lifted with tape. They may also be collected using an <u>electrostatic dust</u> lifting process.

### How is it Collected?

 <u>3-D:</u> This type of impression can be documented using photography as well as by <u>casting</u>, which involves using dental stone or a similar substance to <u>preserve the dimensional</u> <u>characteristics of the print</u>





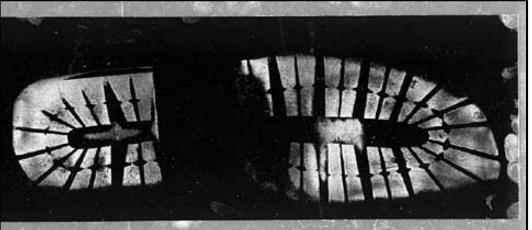
### Casting Footwear Impressions

#### **Crime Scene Investigator Network**

# Casting Footwear Impression Video Discussion Questions

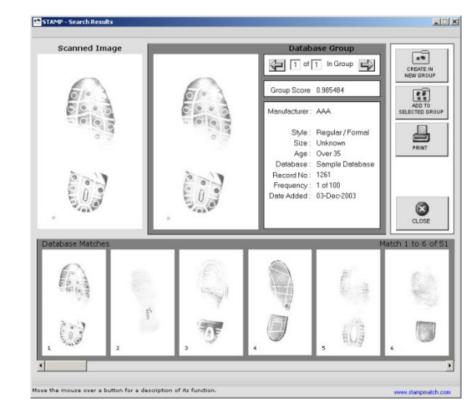
- Why do you think is it necessary to photograph the footwear impressions BEFORE you case them?
- What purpose does the scale (the white L shaped object) serve?
- Why do you think it is important to pour the cast over more than just the visible impression?
- Why do you think it is important to wait the 30 minutes before even attempting to move the impression?

 Investigators can analyze a shoe print to determine its class, or the <u>type and</u>
<u>brand</u> of shoe. They will also look for individual characteristics, such as wear patterns and specific damages or defects.



case.

 Databases of shoe prints are available for investigators to help them determine the <u>brand</u> of shoe to provide <u>leads</u> for a



• Depending on the quality of the impression, investigators may be able to determine a person's speed (walking vs. **<u>runninq</u>**) as well as estimate the size of a person based on the impression's depth.

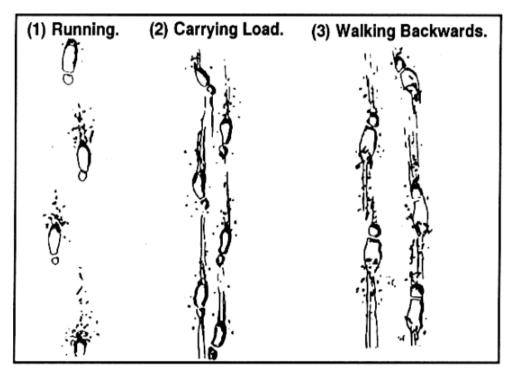


Figure 6-5. Different types of footprints.

- Features to analyze:
  - Tread patterns, size, and depth
  - Wear patterns caused by the way a person walks
  - Material defects or damage (nicks, cuts, etc.)
  - Other trace materials, such as soil, tar, rocks, and paint that would indicate where a person has been



### Summary 3-2-1

- 3 things I learned about Impression Evidence:
- 2 Things I found interesting:
- 1 question I still have: