Unit 7: Impression Evidence: Shoe Prints

By the end of this section of the unit, you will be able to:

- Discuss the different collection methods use and the importance of each step
- Analyze the different walking patterns of individuals
- Examine and analyze your own shoe prints
- Determine the relationship between height and shoe size
- Match different partial footprints based on distinguishing factors

Unit Vocabulary

- Impression: __________________________

- Casting: ____________________________

- Wear Patterns: ______________________

- Tread Patterns: ______________________

- Gait: ______________________________
What is impression evidence?

- Impression evidence can be defined as
  ______________________________________________________________________
  ______________________________________________________________________
  ______________________________________________________________________

- Impressions are created when one object is pressed against another material with enough force to leave an impression of the object.
  _______________, tool marks, _______________, _______________, and marks on a fired bullet are several examples of impression evidence.

- Impressions may be found in or on many different types of materials. The quality of the impression depends on the _______________________________ and the _______________________________, 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

  ______________________________________________________________________

  and other objects found in a suspect’s possession to evidence at a crime scene.

- Collection of impression evidence can be accomplished using several methods:

  ________: This type of impression is documented using _______________. Some impressions may be dusted with fingerprint powder to be photographed or lifted with tape. They may also be collected using an _______________________________ lifting process.

  ________: This type of impression can be documented using photography as well as by ________________, which involves using dental stone or a similar substance to

  ______________________________________________________________________.

Casting Footwear Impression Video Questions: https://www.youtube.com/watch?v=mquyNZaNbPo

1. Why do you think is it necessary to photograph the footwear impressions BEFORE you case them?

2. What purpose does the scale (the white L shaped object) serve?
3. Why do you think it is important to pour the cast over more than just the visible impression?

4. Why do you think it is important to wait the 30 minutes before even attempting to move the impression?

Show Print Evidence

- Investigators can analyze a shoe print to determine its class, or the ______________ of shoe.
- They will also look for individual characteristics, such as ______________ and specific damages or defects.
- Databases of shoe prints are available for investigators to help them determine the brand of shoe to provide leads for a case.
- Depending on the quality of the impression, investigators may be able to determine a person's speed (__________________________) as well as estimate the ______________ based on the impression's depth.

- 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

- Pirate
- Ninja
- Zombie
- T-Rex