1. What is impression evidence?

Impression evidence can be generally defined as ___________ or ___________ that have retained the characteristics of other objects through direct ___________. Impressions are created when one object is pressed against another material with enough ___________ to leave an impression of the object.

Shoeprints, ___________ marks, tire ___________, bite marks, and marks on a fired ___________ are several examples of impression evidence.

Impressions may be found in or on many different types of ___________. The ___________ of the impression depends on the object making the impression and the ___________ conditions, such as how hard or soft it is and what type of material it is (soil, mud, dust, concrete, grass, skin, etc.)

2. Collection Methods

Investigators analyze the impression evidence to find unique _______________ to link shoes, tires, tools, 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:

2-D: This type of impression is documented using ___________. Some impressions may be dusted with fingerprint ___________ to be photographed or lifted with ___________. They may also be collected using an ___________ dust lifting process.

3-D: This type of impression can be documented using ___________ as well as by ___________, which involves using dental stone to preserve the dimensional characteristics of the ___________.

3. Tire Track Evidence

Tire tracks are important in forensic investigations and are usually found in road ___________ scenes or in the access and escape ___________ of other crime scenes. Tracks help investigators identify the type of ___________ that left them. Investigators may make ___________ ___________ of a tire or ___________ ___________ of a track. They will also take ___________ that can later be used to prove a match.

Features to analyze:

• ___________ pattern
• ___________ & ___________ of the tread pattern
• Unique characteristics due to the ___________ pattern or ___________
4. Tool Mark Evidence
Certain ______________ or ______________ may be left on a tool when it is made or used, which can be used to find matches between evidence at a crime scene and tools or objects found at a suspect’s home. Tool marks can be classified two ways: ______________ or ______________.

Features to analyze:
• ______________ of the impression
• Ridges or striation ______________
• ______________, such as nicks and chips
• ______________ chips or ______________ shards left on a tool

5. Shoe Print Evidence
Investigators can analyze a shoe print to determine its ______________, or the type and brand of shoe. They will also look for ______________ characteristics, such as ______________ ______________ and specific ______________ or ______________.

Databases of shoe prints are available for investigators to help them determine the ______________ of shoe to provide leads for a case.

Depending on the quality of the impression, investigators may be able to determine a person’s ______________ (walking vs. running) as well as estimate the ______________ of a person based on the impression’s depth.

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

6. Bite Mark Evidence
Investigators can analyze ______________ ______________ for characteristics to help them identify victims or suspects as well as to exclude others. Marks can be left on a victim’s ______________ or other ______________, such as Styrofoam cups, gum, or foods. ______________ or ______________ may be left behind that can be tested for ______________.

Dental records including ____-______ can also provide useful information, especially when attempting to identify a victim.

Features to analyze:
• ______________ of bite mark (human or animal)
• Characteristics of the ______________ (position, evidence of dental work, wear patterns, etc.)
• ______________ of area to estimate how long ago the bite occurred (old or recent bite)
• Swab for ______________ ______________ for DNA tests