Name________________________ Date________ 12 points Due_________ 

Impression Evidence Review

Fingerprints

1. What is impression evidence? ____________________________________________________________________________

2. Since _______, Fingerprints have been used for identification. Because no __________________ have the same ridge patterns, not even identical twins.

3. _______________ are impressions created by the ridges on the surface of the skin. They are on _______________ and _______________ of your feet. Biologically, they serve to help with____________________________.

4. How are fingerprint impressions created?

________________________________________________________________________________________

5. What is meant by a latent print? ’

________________________________________________________________________________________

6. Describe the procedures you would use to collect latent print evidence (how do you dust?)

step#1 __________________________________________________________________________

step#2 __________________________________________________________________________

step#3 __________________________________________________________________________

Describe the difference between the 3 other types of fingerprints (impressions):

Patent: __________________________________________________________________________

Plastic: __________________________________________________________________________

Inked __________________________________________________________________________

7. Describe 2 ways that latent prints can be visualized. 1.) ____________________________

________________________________________________________________________________________

2.) ________________________________________________________________________________

9. What are the 8 types of ridge patterns: _ plain arch ____________________________

________________________________________________________________________________________

__________________________________________, and __ accidental whorl

10. Describe how to take someone’s fingerprints as evidence: 

________________________________________________________________________________________
11. Identify the following ridge patterns using the 8 types (assume it is the right hand):

[Images of fingerprint patterns]

12. What is the difference between radial and ulnar loops? ____________________________

13. Which ridge pattern is the most common? __________________ least common? ______

14. Why are arch patterns so different than loops and whorls? ____________________________ and ____________________________

15. ____________________________ (p. 86) was a gangster that tried to alter his fingerprint ridge pattern using acid.

16. What are minutiae? ____________________________

17. Fingerprint Examiners will need to find _____ to _____ points of comparison to say it is a match. On average, there are ______ (number) individual ridge characteristics per print.

18. Identify the following types of ridge characteristics:

[Images of fingerprint patterns]

19. What is the ridge count for the example #1? ____________

20. What is A.F.I.S.?

21. Is it possible to identify a suspect from a bare foot print left at a crime scene? Explain your answer. ____________________________
22. Identify the following as minutiae types. Use page # 84 in your text to find the types of minutiae:

- a. 
- b. 
- c. 
- d. 
- e. 
- f. 
- g. 
- h. 
- i. 
- j. 
- k. 
- l.
Shoe and Tire Impressions

1. ______________________ are 2D and made by placing material on, transferring from or by removing it from a hard surface.

2. If a shoe impression is made of dust or dirt, the print is lifted by applying a lifting material or ______________________.

3. If the impression is difficult to lift because it is in dirt or dust, an (a) ______________________ is applied, the print is lifted to film then photographed.

4. ______________________ is created when a suspect walked in either blood or some other liquid and stepped again to create the print.

5. ______________________ is 3-D and usually created on pliable materials such as soils. Three Dimensional or 3-D evidence is preserved using a ______________________.
   Usually, dental stone or ______________________ is mixed and poured into the impression and then photographed.

6. What is the difference between class characteristics and individual characteristics of shoe impressions?
   ______________________
   Give an example of each: ______________________ and ______________________

7. If the impression evidence is found in snow, what is the procedure for preserving the print?
   ______________________

8. Describe the unique (individual) characteristics of shoes (points of comparison)
   ______________________, ______________________, ______________________, and ______________________.

9. Unique characteristics of tire impressions are: ______________________, ______________________, ______________________; and ______________________.
9. Unique characteristics of tire impressions are: ____________________________
                  ____________________________ ; and ____________________________.

10. What are tire sipes? ____________________________ How can they be used for
    identification? ____________________________

11. What is the difference between tire track width and tire tread width measurements?
    ____________________________

12. When impression evidence is photographed, what is one of the most important things to include
    in the photo (other than the impression)? ____________________________

13. Describe the procedure you would employ to collect a tire tread print:
    ____________________________

14. What if you don’t have suspects or a specific car/vehicle to compare your prints to, can the prints
    tell you where to look?
    ____________________________

15. Explain why you should not place a suspect’s shoe on top of a bloody shoe print left on a kitchen
    floor. ____________________________

16. **Tire Characteristics:** label the tire tread patterns in the follow print: *slot, lug, rib, groove*
    *embedded nail, and sipe.*
1. In criminal trials, dental evidence can be helpful in what 2 ways:
   1.)
   2.)

2. Why is possible to identify people from their teeth?

3. Why is it more reliable than fingerprints?

4. What is the job of a Forensic Odontologist?

**Number and Label** the teeth types in the diagram:
5. How many teeth are found in an adult human skull? 

6. Who would have sharper teeth a younger person or teenager or an adult? Explain your answer.