

Impression Analysis Test Review

1. **What is the most common type of fabric impression?** *glove impressions*
2. **What makes cloth gloves distinct?** *snags, tears, holes, imperfections in the weave pattern*
3. **What makes leather gloves distinct?** *wrinkle formations, crease formations, surface cracks, tears*
4. **What is a crease formation?** *caused when the glove doesn't fit properly and it creases up on the hand*
5. **Are fingerprint or glove prints stronger?** *fingerprints*
6. **What special care has to be used when collecting glove prints?** *use light source to find print, use small amount of fingerprint powder (gently applied), remove object with print rather than tape lifting*
7. **What surface should comparison glove prints be made on?** *glass*
8. **What other types of crimes can involve fabric impressions other than glove prints?** *hit and run (impression left on car), knee prints where criminal kneeled by victim, swipes from bloody clothing against a wall*
9. **What is electrostatic lift of prints?** *it uses a plastic lifting film and electrostatics (static "cling" caused by an electric discharge) to lift fingerprint powder rather than tape lifting*
10. **Are impressions from fabrics(gloves), tires, tools, and shoes class or individual evidence? Why?** *class because while the object can be positively matched to the crime scene impression, it doesn't necessarily mean the owner used the object at the time of the crime*
11. **Review your video questions from Marathon Man and Frozen Evidence.**
12. **What types of prints are formed from impressions?** *latent, visible, and plastic*
13. **How does OE differ from replacement tires?** *OE (original equipment) are the tires sold on new cars (they are exactly alike in brand and size)*
14. **Define the following:**
 - a. *grooves- marks around a tire*
 - b. *slots- marks across a tire*
 - c. *sipe- small grooves*
 - d. *tread wear indicator- raised bar under design that shows after wear*
 - e. *track width- measured from right center to left center*
 - f. *wheelbase- measured from center of front tire to center of back tire*
 - g. *turning diameter- diameter of circle made when the wheels are fully turned*
15. **What should be done before casting an impression?** *take and log photographs*
16. **What substances are used to cast impressions?** *dental stone, plaster of paris, snow print wax*
17. **Who maintains a file of tire tread patterns?** *FBI*
18. **Visible prints left when someone steps or drives through a material like blood is considered which: latent, visible, or plastic? visible Would these be 2-D or 3-D impressions? 2-D**

19. How did shoe impression evidence impact the O.J. Simpson Civil Trial?
Simpson wore very unique size 12 Bruno Magli shoes that left impressions at the crime scene
20. How should prints be visualized? *bright light at a low angle*
21. What do you call the photographs taken of impressions at a scene (with ruler)? *examination quality photographs*
22. How can a 3-D impression be highlighted? *colored wax spray*
23. If a footprint is made with blood, what type of chemical can help visualize it?
luminol
24. Will impressions made by objects such as tires and shoes stay the same throughout consistent wear? *no*
25. When and where did tool mark analysis begin? *Europe, around 1900*
26. When did tool mark analysis become common in the U.S.? *in 1930's*
27. What type of substance should comparative tool marks be made in? *soft substance like lead*
28. What is comparative micrography? *using comparison microscopes to compare marks made a crime scene with test marks*
29. How should evidence where tool marks have been left be preserved? *the preferred method is to remove the object the tool mark evidence is on itself; otherwise casts and photographs can be taken*
30. Should you place a tool in a mark found at a scene to see if it matched? Why? *no, might alter or damage the scene mark*
31. What role did the following people play in the Lindbergh Kidnapping case?
 - a. Charles Lindbergh- *father*
 - b. Anne Morrow Lindbergh- *mother*
 - c. Betty Gow- *nurse*
 - d. Norman Schwarzkopf- *captain of NJ police and lead investigator*
 - e. John Condon- *interested citizen who pledge \$1000 reward and ended up go between*
 - f. Bruno Richard Hauptmann- *German man accused and convicted of kidnapping and murdering Lindbergh baby*
32. What evidence was found at the scene? *homemade ladder with top rung broken, ransom note with German tone*
33. Was the baby recovered when the ransom was paid? *no, told to go to boat on Martha's Vineyard, but no baby was found*
34. How did the baby die? *first thought to have been injury to head, later determined to be suffocation*
35. How was Hauptmann caught? *tried to spend some of the ransom money at a gas station*
36. What evidence was found at Hauptmann's house? *tools matched the impressions used to make ladder, wood from ladder match missing attic joist, large amount of ransom money, Condon's phone number*