Power of Evidence Unit Review

Name _____

Across

1. Can be matched to a weapon and analyzed to determine a weapon's size, shape, or length as well as clues about the victim or suspect
5. Genetic material that can be extracted from body tissues and used to create a profile to identify a victim or suspect
6. Bottom portion of hair in which nuclear DNA can be found
10. The universal solvent
11. Points on a fingerprint where the ridge structure changes, such as forks, bridges, and deltas
13. Can be analyzed to determine the sex, stature, age, and race of a victim
14. Instrument used to examine hairs & fibers in detail
16. Can be analyzed to determine its properties, such as color, tint, thickness, density, chemical composition, and refractive index (RI).
20. Process of separating a mixture into its individual components, such as determining the compounds in gasoline
21. Type of print left on a surface at a crime scene, such as a tool handle, glass, door, etc.
24. Can be classified as loops, whorls, and arches
25. Forms when an object is torn or broken; edges can be examined to see if they match
26. Database used to find matches to bullets or firearms found at a crime scene

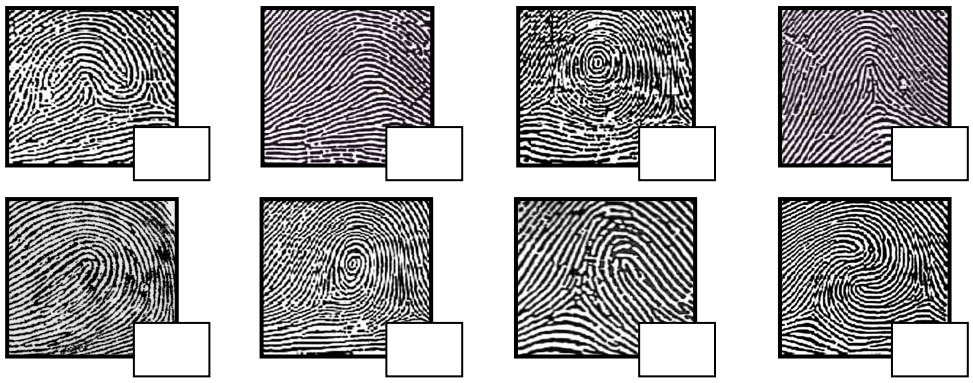
Down

2. Type of fiber made from plants or animals
3. Substance made of keratin and is composed of the cuticle, cortex, and medulla
4. Database that is used to find matches for DNA evidence gathered from a crime scene or victim
7. Examiners may analyze a this type of evidence to determine the type of paper used, printing method, handwriting style, or type of ink to find a match to a suspect
8. Substances that give color to objects, such as paint, hair, and fibers
9. Study of firearms and ammunition
12. Abbreviation for gunshot residue
15. Evidence that is formed as an object leaves a "mark" on another one, such as tire tracks, toolmarks, & bitemarks
17. Most common type of fingerprint pattern
18. Least common type of fingerprint pattern
19. Type of fiber that is man-made
22. Database that can be used to find matches for fingerprints found at a crime scene
23. Principle that states "with contact between two items, there will be an exchange."

Part B: Answer each of the following questions to the best of your knowledge.

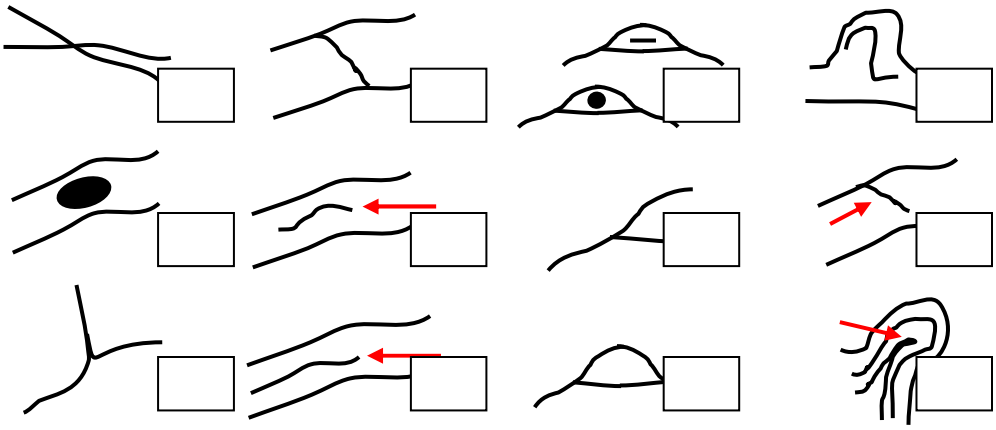
A. Identify each fingerprint below using the classification groups listed. (8 points)

1. Plain arch
2. Tented arch
3. Radial loop (right thumb)
4. Ulnar loop (right thumb)
5. Plain whorl
6. Central pocket whorl
7. Double loop
8. Accidental



B. Identify these ridge characteristics. (12 points)

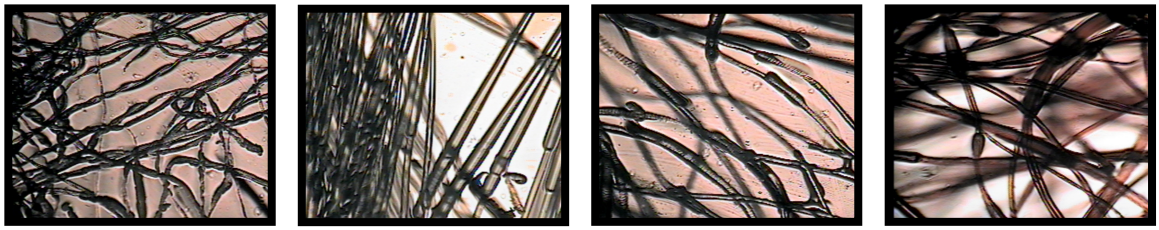
A. Bridge
B. Core
C. Crossover
D. Delta
E. Dot or Island
F. Enclosures
G. Ending Ridge
H. Eye
I. Fork
J. Hook
K. Short Ridge
L. Specialty



C. Identify each of the following hair samples as HUMAN, RABBIT, RAT, CAT, or DOG. (5 points)

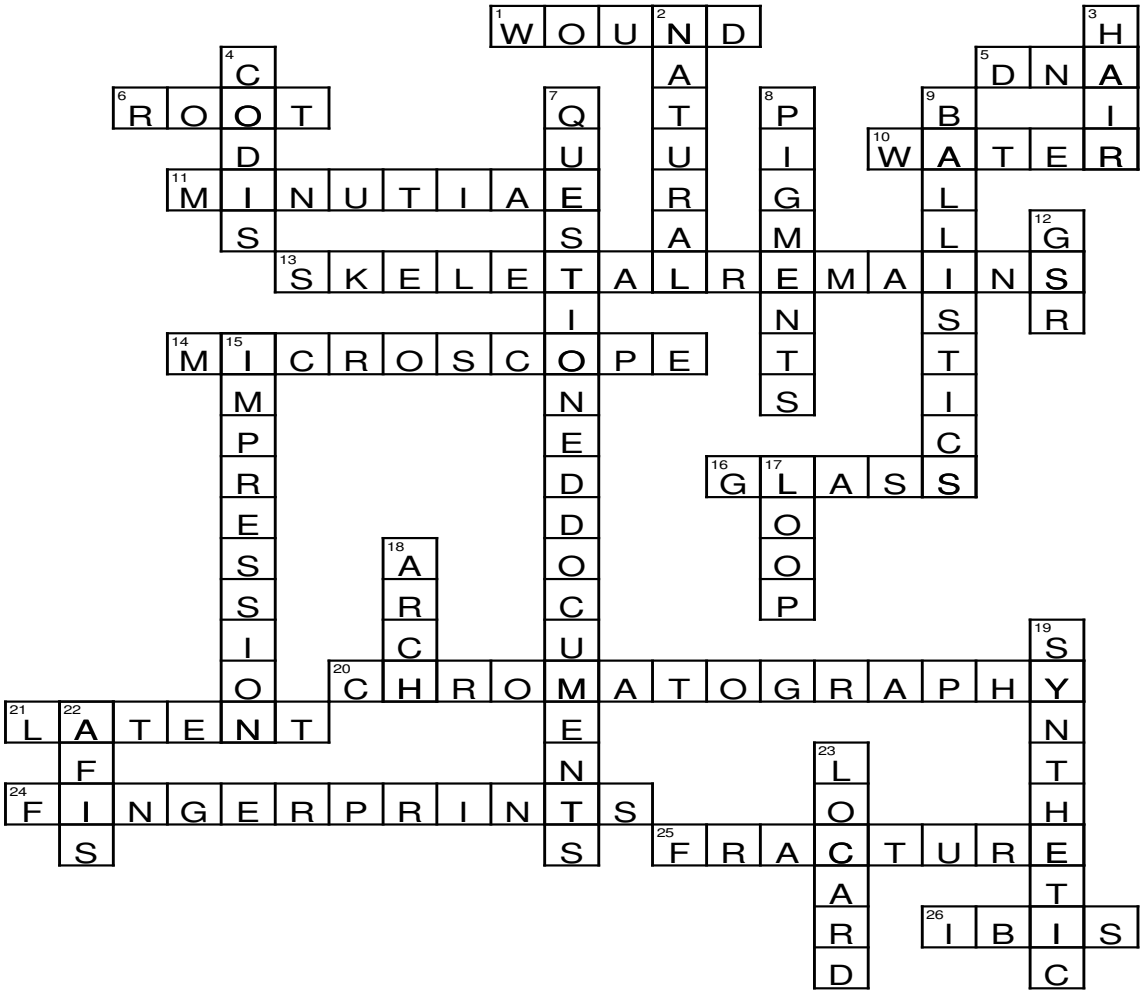
_____ _____ _____ _____ _____

D. Identify each of the following fiber samples as WOOL, COTTON, POLYSTER, or NYLON. (4 points)



_____ _____ _____ _____

Answer Key



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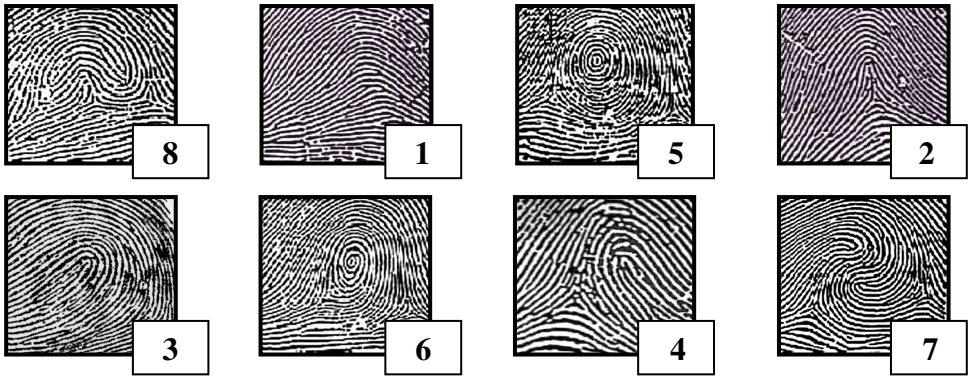

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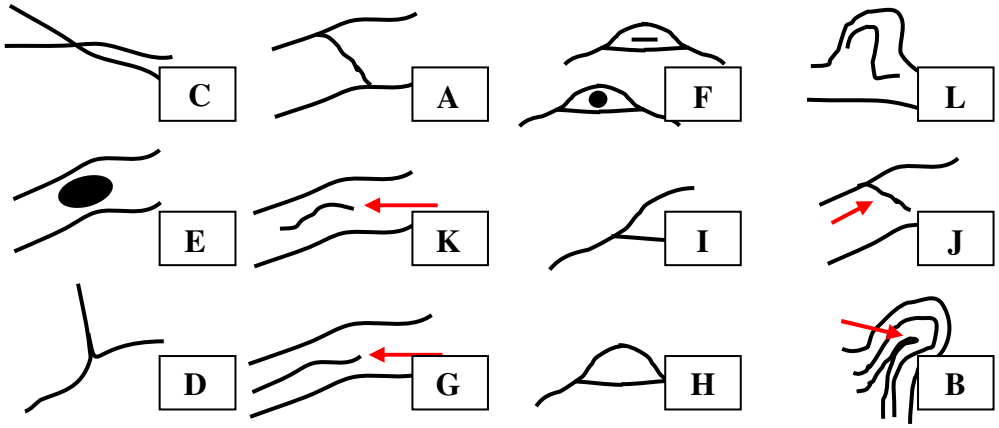

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CAT **RABBIT** **HUMAN** **RAT** **DOG**

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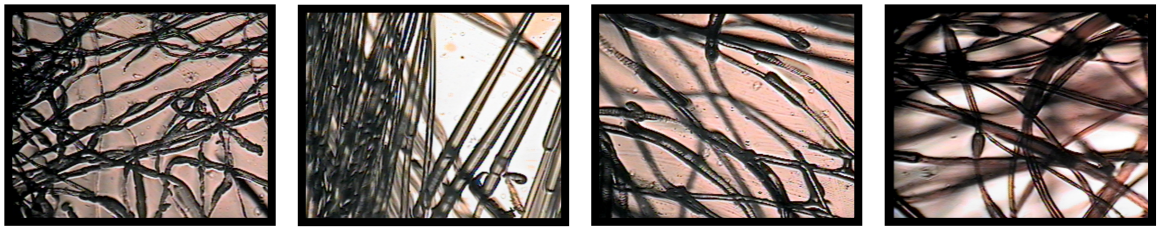

COTTON **NYLON** **WOOL** **POLYESTER**