Forensic Science
Power of Evidence Quiz

Part A: Choose the best answer for each. (1 point each)

1. The most common type of fingerprint pattern is the:  
   A. arch.  
   B. loop.  
   C. whorl

2. A type of fiber that is made from plants or animals is classified as:  
   A. natural.  
   B. synthetic.  
   C. original.

3. Which term refers to a print found at a crime scene?  
   A. Evidence print  
   B. Latent print  
   C. Clue print

4. The substance that makes up hair and fingernails is called:  
   A. medulla.  
   B. cuticle.  
   C. keratin.

5. Type of fiber that is man-made, such as nylon or rayon, is classified as:  
   A. natural.  
   B. synthetic.  
   C. normal.

6. Substances that give color to objects, such as paint, hair, and fibers, are called:  
   A. pigments.  
   B. paints.  
   C. oils.

7. The bottom portion of a hair nearest the scalp in which DNA may be found is called:  
   A. medulla.  
   B. shaft.  
   C. root.

8. The smallest unit of a textile material is called a:  
   A. scrap.  
   B. fiber.  
   C. core.

9. The ________ Principle states that with contact between two items, there will be an exchange.  
   A. Locard  
   B. Local  
   C. Switch

10. What database can be used to find matches for DNA samples from a crime scene?  
    A. IBIS  
    B. AFIS  
    C. CODIS

11. Instrument that may be used to examine hairs and fibers in detail is a:  
    A. telescope.  
    B. microscope.  
    C. spectroscope.

12. The physical separation of a mixture into its individual components, such as black ink being separated into different colors, is called:  
    A. pigmentation.  
    B. chromatography.  
    C. chemical division.

13. The study of firearms and ammunition is called:  
    A. ballistics.  
    B. toxicology.  
    C. serology.

14. What does the abbreviation GSR refer to?  
    A. Gunshot Residue  
    B. Gunshot Relation  
    C. Gunshot Return

15. Hair samples can be tested for nuclear DNA whether or not the root is present.  
    A. True  
    B. False

16. It is possible to show that a hair came from a specific person or animal.  
    A. True  
    B. False

17. The most common type of plant fiber is:  
    A. cotton.  
    B. wool.  
    C. silk.

18. What is known as the universal solvent?  
    A. water  
    B. rubbing alcohol  
    C. acetone

19. A type of fiber that is man-made, such as nylon or rayon, is classified as:  
    A. natural.  
    B. synthetic.  
    C. normal.

20. How many minutiae points must be in common in order for prints to be considered matches in the United States?  
    A. 12  
    B. 20  
    C. There is no minimum.
Part B: Complete each section using what you have learned in class.

21. Identify each of the fingerprint patterns using the word list provided. (6 points)

- Plain arch
- Tented arch
- Loop
- Plain whorl
- Double loop
- Accidental

22. Identify each of the ridge characteristics using the word list provided. (6 points)

- Bridge
- Core
- Crossover
- Dot or Island
- Ending Ridge
- Fork (Bifurcation)

23. Identify each of the hair samples as RAT, HUMAN, or RABBIT. (3 points)

24. Identify each of the fiber samples as COTTON, WOOL, or NYLON. (3 points)

Extra Credit: What does the acronym AFIS represent?

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