

Unit 3: Fingerprints, DNA, and Blood

Estimated Topic Length: 3 weeks

Objectives:

1. Discuss the history of fingerprinting.
2. Describe the characteristics of fingerprints.
3. Identify the basic types of fingerprints.
4. Describe how criminals attempt to alter their fingerprints.
5. Determine the reliability of fingerprints as a means of identification.
6. Explain how fingerprint evidence is collected.
7. Describe the latest identification technologies.
8. Determine if a fingerprint matches a fingerprint on record.
9. Use the process of lifting a latent print.
10. Explain how crime-scene evidence is collected for DNA analysis.
11. Describe how crime-scene evidence is processed to obtain DNA.
12. Describe how radioactive probes are used in DNA fingerprinting.
13. Explain how DNA evidence is compared for matching.
14. Explain how DNA fingerprinting is used to determine if specimens come from related or unrelated individuals.
15. Explain how to use DNA fingerprinting to identify DNA from a parent, child, or relative of another person.
16. Explain the composition of blood.
17. Describe the functions of blood cells.
18. Describe a brief history of the use of blood and blood-spatter analysis in forensics.
19. Describe how to determine the blood type of a sample of blood.
20. Describe how to screen for the presence of human blood.
21. Calculate the probability of certain blood types within a population.
22. Conduct a blood-spatter analysis.
23. Examine stab wounds and describe the nature of the weapon.
24. Use blood-spatter evidence to recreate the events at a crime scene.

Textbook Chapters:

- 6 (Fingerprints)
- 7 (DNA Profiling)
- 8 (Blood & Spatter)