

## Forensic Science Unit 1 Review: Intro to Forensic Science and History; Laws in Forensic Science

### Intro

1. What is Forensic Science?
2. Criminalistics vs. Criminology
3. Know the contributions of each to the history of Forensic Science:
  - a. Calvin Goddard
  - b. Francis Galton
  - c. Mathieu Orfila
  - d. William Herschel
  - e. Alphonse Bertillon
  - f. Henry Faulds
  - g. Sherlock Holmes and Sir Arthur Conan Doyle
  - h. Locard
  - i. Karl Landsteiner
  - j. Sir Alex Jeffrys
  - k. Leone Lattes
  - l. Yi Yu Ji
4. Why did anthropometry fail? What was it replaced with?
5. How and why is the scientific method used in Forensic Science?
6. Know how to apply Locard's Exchange Principle
7. What is the CSI effect?
8. What types of evidence do the crime labs at the DEA, ATF, USPS, FBI examine? Do they specialize?
9. Know the responsibilities (types of evidence they study) of the different Forensic units: Physical Science, Biology, Firearms, Questioned Document, Photography, Toxicology, Latent Fingerprint, Polygraph Unit, Voice Print, CSI, Forensic psychiatry, odontology, entomology, pathology, engineering, anthropology and computer/digital analysis.

### Laws

10. What is the constitution?
11. What is the difference between civil and criminal laws? Who are the plaintiff and defendant in a criminal case?
12. What are administrative, equity, statutory, and common laws?
13. What is double jeopardy?
14. What is preponderance of evidence vs beyond a reasonable doubt?
15. What happened in *Miranda v Arizona* and what was the impact on Forensic Science? What amendments were involved?
16. Why do Forensic Scientists even need to know about laws?
17. What is the difference between a felony and misdemeanor?
18. What is an inchoate offense?
19. What occurs during an arraignment?
20. What different pleas can be entered?
21. What are the facets of guilt? (MMO)
22. What is an expert witness? How do they differ from a lay witness?
23. What does it mean when something is **probative**? **Material**?
24. How did the Frye Standard affect admissibility of evidence?
25. How did the Daubert Ruling affect admissibility of evidence?
26. How did the *Kumho Tire v Carmichael* affect admissibility of evidence?
27. How did the *Copollino v State* affect admissibility of evidence?

28. What are the three elements needed in order for something to be ruled a crime (and thus, something that is prosecutable)?
29. Who is the prosecutor/prosecution? Who is the defendant/defense?
30. What is probable cause?