

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?

Information you need to know:

1. Standard guideline for determining the judicial admissibility of scientific examination came from what court ruling?
 - a. *Frye v. United States*
 - b. *Kumho Tire Co., Ltd. v. Carmichael*
 - c. *Coppolino v. State*
 - d. *Daubert v. Dow*
2. The examination of bite mark evidence and its relation to a criminal investigation is known as:
 - a. Forensic Odontology.
 - b. Forensic Anthropology.
 - c. Forensic Entomology.
 - d. Forensic Pathology.
3. The scientist who's considered to have started the field of forensic ballistics is:
 - a. Albert Osborn.
 - b. Edmond Locard.
 - c. Hans Gross.
 - d. Calvin Goddard.
4. Which individual contributed knowledge to the forensic characterization of blood:
 - a. Karl Landsteiner
 - b. Alphonse Bertillon.
 - c. Alec Jeffries.
 - d. Mathieu Orfila
5. A basic function of a forensic scientist includes:
 - a. furnishing training on the proper collection of physical evidence.
 - b. analysis of physical evidence.
 - c. providing expert testimony.
 - d. both (a) and (b)
 - e. all of the above
6. Preventative laws are what type of laws?
 - a. Administrative
 - b. Common
 - c. Civil
 - d. Equity
7. The gatekeeping role of the judge for all expert witness was determined by what trial?
 - a. *Frye v. United States*
 - b. *Kumho Tire Co., Ltd. v. Carmichael*
 - c. *Coppolino v. State*
 - d. *Daubert v. Dow*
8. The correct order of pursuing justice is:
 - a. Enter a plea, arraignment, grand jury, trial
 - b. Arraignment, grand jury, enter a plea, trial
 - c. Arraignment, enter a plea, grand jury, trial
 - d. Grand jury, enter a plea, arraignment, trial
9. All of the following have forensic crime labs EXCEPT:
 - a. DEA
 - b. ATF
 - c. FBI
 - d. UPS
10. The unit responsible for investigating a safe opened by a crowbar in a home invasion is:
 - a. firearms unit
 - b. physical science
 - c. biology
 - d. questioned document

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Rewrite any statements below that are FALSE to make them TRUE.

11. Forensic science is applying science to criminal and civil laws enforced by the police in a criminal justice system.
 - a. True
 - b. False
12. The premise in which Locard's Exchange Principle is based is that every criminal can be connected to a crime by dust particles carried from the crime scene.
 - a. True
 - b. False
13. The scientific method requires investigators to conduct a testing process designed to verify or disprove a hypothesis.
 - a. True
 - b. False
14. In 1993 the U.S. Supreme Court decided that the *Frye v. United States* precedent is an absolute prerequisite to the admissibility of scientific evidence.
 - a. True
 - b. False
15. Only those individuals who have accredited professional credentials from recognized university or medical programs are allowed to testify in court as an expert witness.
 - a. True
 - b. False
16. Strict guidelines that ensure careful and systematic collection, organization, and analysis of information is a process known as the scientific method.
 - a. True
 - b. False
17. The first system of personal identification was fingerprinting.
 - a. True
 - b. False
18. The Bill of Rights grants us the right to not testify against someone we love.
 - a. True
 - b. False
19. When a jury cannot reach a decision, a retrial of the accused cannot occur as it is considered double jeopardy.
 - a. True
 - b. False
20. Why could OJ Simpson be tried twice for the murders of Nicole Brown Simpson and Ronald Goldman?
21. Explain what is necessary to label something a crime versus a terrible accident. Are you guaranteed that you will not go to trial if it is not labeled a crime? DEFEND YOUR ANSWER.