

1987: DNA profiling was introduced for the first time in a U.S. criminal court.

awarded the Nobel prize for his work in 1930.

1904: Edmond Locard published *L'enquete criminelle et les methodes scientifique*, in which appears a passage that may have given rise to the forensic precept that "Every contact leaves a trace."

**Locard's Exchange Principle: If a criminal came in contact with an object or person, a cross-transfer of evidence occurred.** Thus, every contact leaves a trace.

Through a series of successful and well-published investigations.

Locard's Exchange Principle gained support. He showed how every criminal can be connected to a crime by dust particles carried away from the crime scene.

During post-WWI, his success served to create the formation of police laboratories in Vienna, Berlin, Sweden, Holland and Finland.

1910: Albert S. Osborne, an American and arguably the most influential document examiner, published "**Questioned Documents**". He is responsible for developing the fundamental principles of Document examination that was responsible for the acceptance of documents as scientific evidence by the courts.

1910: Edmond Locard established the first police crime laboratory. He became the founder and director of the Institute of Criminalistics at the University of Lyons.

1915: Leon Lattes developed the first antibody test for ABO blood groups. He first used the test in casework to resolve a marital dispute.

1918: Edmond Locard first suggested 12 matching points as a positive fingerprint identification.

1974: The detection of gunshot residue (GSR) using scanning electron microscopy with electron dispersive X-rays (SEM-EDX) technology was developed by J. E. Wessel, P. F. Jones, Q. Y. Kwan, R. S. Nesbitt and E. J. Rattin at Aerospace Corporation.

1984: Alec Jefferys developed the first DNA profiling test. It involved detection of a multilocus RFLP pattern. He published his findings in *Nature* in 1985.

Name: \_\_\_\_\_

## HISTORY OF FORENSICS

### What is forensic science?

Forensic science is the \_\_\_\_\_ of \_\_\_\_\_ to the criminal and \_\_\_\_\_ laws that are \_\_\_\_\_ by police agencies in a criminal justice system.

### Forensic professions

Engineering Science

Pathology

Questioned Documents

Behavioral Science

Anthropology

Tool Mark Examination

Computer/Digital Analysis

Odontology

Fingerprints

Toxicology

Photography

Ballistics

Entomology

Hair/Fibers

### Crime laboratory services

- Physical science unit
  - Drugs, glass, paint, explosives and soil
  - Biology Unit
  - DNA profiling of dried bloodstains and other body fluids
  - Comparison of hairs and fibers
  - ID and comparison of plant materials (wool, seeds, etc.a)
- Firearms Unit
  - Examines firearms, discharged bullets, cartridge cases, shotgun shells, and ammunition. Gunshot Residue (GSR) is also studied and analyzed.
- Document Examination Unit
  - handwriting and typewriting document analysis as well as paper and ink analysis
- Photography Unit
  - Digital, infrared, ultraviolet and X-ray photography yields new information
- Full Service Labs also provide
  - ~~toxicology~~ toxicology Units
  - Latent Fingerprint Unit
  - polygraphy Unit
  - Voiceprint Analysis Unit