**Define the following:**

Use this GUIDE and your notebooks to create your study guide for the ***Final Exam*** 🡪 must be handwritten but you may use it during your final

* Forensics
* Fact
* Alibi
* Accomplice
* Witness
* Secondary suspect
* Toxicologist
* entomologist
* Direct evidence
* Circumstantial evidence
* Trace evidence
* Locard’s principle
* Transfer evidence
* Perpetrator
* Biological evidence
* Physical evidence
* Synthetic fibers
* Primary crime scene
* Secondary crime scene
* Phishing
* Forgery
* Counterfeiting
* Ballistics
* Latent fingerprints
* Patent fingerprints
* Presumptive tests
* Chromatography
* Electrophoresis
* Deductive reasoning
* DNA
  + Thymine
  + Cytosine
  + Adenine
  + guanine
* Polymerase chain reaction (PCR)
* DNA restriction enzyme
* Anthropology

**Describe:**

* Reliability of eye witness testimony
* How microscopes are useful to forensic scientist
* How ballistic specialists use microscopes
* The job of the following individuals
* CSI Unit.
* Police officer
* District attorney
* Medical examiner
* Detective
* Why it is difficult to counterfeit US currency
* The steps of a good observer
* Anatomy of hair
* Anatomy of a fingertip
* The seven S’s
* How can we determine time of death
* Kastle-meyer test – what will you see?
* Methods for collecting trace evidence
  + Picking, Lifting, Scraping, Vacuum
* How evidence is packaged
* Fingerprints
  + Loops, Whorls, Arches
  + Minutiae
  + Ridges

Bifurcation, Enclose, Fork, Ridge ending

* Most common and least common type of fingerprint
* Methods and chemicals used to recover fingerprints
* Handwriting analysis
  + Baseline characteristics
* Blood
  + Structure of blood
    - Red blood cells vs white blood cells (jobs and structure)
    - Hemoglobin
    - Platelets
    - Plasma
    - Antigens
  + Types of blood
    - A, B, O, AB
    - Rh factor
  + What types of blood are compatible for donation?
* Types of bloodstains
* Methods for viewing blood stains
* What can bloodstain pattern analyst determine from a blood stain?
* Where in the human body is DNA found? Where is it NOT?
* What is the general shape of DNA?
* Can two people have the same exact DNA?
* What is toxicology? What can be determined in the Forensic Toxicology Unit?
* What does an entomologist do for a murder investigation?

**Be familiar with the following case studies**

* JonBenet Ramsey
* John Dillinger
* Ted Bundy
* Richard Ramirez