

Format: 22 multiple choice questions and 4 open ended questions

Concepts to Review:

- Hair Evidence
  - Be able to explain why hair evidence is useful in solving crimes.
  - Be able to describe some characteristics of a hair that can be inferred from analyzing it.
  - Know the three parts of a hair: *cuticle*, *cortex*, and *medulla*, and be able to label a diagram of these parts.
  - Be able to describe some ways in which a hair can vary from person to person.
  - Be able to explain the difference between the *root* and the *tip* of a hair sample, and know some of the terms that are used to describe each of these parts.
  - Understand why some samples of hair are more likely to contain useable DNA than other hair samples.
  - Be able to describe some ways that a member of the CSI unit might collect hair samples from a crime scene.
  - Be able to describe some *limitations* of forensic hair analysis.
  
- Fiber Evidence
  - Be able to explain why fiber evidence is useful in solving crimes.
  - Be able to describe some characteristics of a fiber that can be inferred from analyzing it.
  - Be able to explain the difference between *natural* fibers and *synthetic* fibers.
  - Be able to give some examples of natural fibers and some examples of synthetic fibers.
  - Be able to explain how a *burn test* is used to analyze fibers.
  - Be able to describe some ways that a member of the CSI unit might collect fiber samples from a crime scene.
  - Be able to describe some *limitations* of forensic fiber analysis.
  
- Lab Skills
  - Be able to use *deductive reasoning* when trying to investigate a crime.
  - Be able to explain why the compound light microscope is useful in analyzing hair and fibers.
  - Be able to describe the procedures for using a compound light microscope.
  - Be able to explain the roles of different parts of the compound light microscope, including the *objective lenses*, the *coarse adjustment knob*, and the *fine adjustment knob*.
  - Be able to describe how to prepare a wet mount slide.

Resources:

You may use your laboratory notebook during the exam, but you may NOT consult any other notes or handouts (your regular class notebook and anything that was not added to your laboratory notebook during our lab work is NOT ALLOWED).