## Physical Science - Fingerprint "Legal Brief"

As the Assistant District Attorney and Forensic Scientist of Westwood, you have examined the fingerprint found on the broken flask in the "basement lab", and compared it carefully to the available fingerprints of some of the persons of interest in the case. You need to conclude if you believe you have found a match, and, if so, how sure you are of your identification. Express your confidence as "beyond a reasonable doubt", or "a preponderance of evidence", or just "more likely than not".

Make sure your brief includes the following:

- 1. The specific purpose of your test
- 2. A detailed description of how you analyzed the fingerprint
  - a. Which specific fingerprints you quickly eliminated and why
  - b. Which specific fingerprint or prints you examined more closely and how. Remember that in addition to the class of the print (loop, whorl, or arch), you will need to identify as many distinct points of individualization (ridge counts, islands, bifurcations, ridge ends, and dots) on the print as possible to convince the jury that you have found a positive match.
  - c. The possible sources of error in your analysis. Remember that the defense will cross-examine you to cast doubt on your argument.
  - d. Defend the validity of your results! Explain why these sources of error do not invalidate your conclusion.
- 3. A brief summary of your conclusions. This could eventually be used as part of your summary to the jury!

Be sure you use <u>all</u> of the following terms in your report accurately and meaningfully as part of your explanation:

fingerprint classification loop whorl arch minutiae bifurcation ridge end

Use your best "Professional English", and submit your brief typed, double-spaced, and cleanly formatted. Remember that in "Professional English", you should:

- Use brief, concise paragraphs
- Remove unnecessary words and phrases
- Avoid restating your topic sentence at the end of each paragraph unless it really adds something to your argument
- Cite any and all sources you use; you may list your works cited at the end of your report, but you must explicitly identify any quotes, paraphrases, or ideas used in the body of the text where you use it.

To submit your report, share it as a Google Document with me, giving me EDIT PERMISSION, and sending an email to notify me. The time of that email will be considered the time of your submission, and I will ignore any changes to the document after that time.