

Bacterial Unknown Report – Content Information

The following are hints, suggestions, 'ideas' to think about when writing your report

The report includes:

- 1. The identity of the unknown (include the unk # AND the *GENUS & SPECIES*)**
 - 2. A discussion of the process used to identify the unknown**
 - a. Think back to all the tests you performed and analyze your methods
 - i. Consider the quality of your work, did you do the steps correctly, did you forget any 'little' steps, mix-up samples, forget labeling, etc
 - ii. Consider the quality of your unknown culture, was it an actively growing, log phase culture that you used for each of the tests
 - iii. Did you complete all tests, if any were left out, have you done research on the test to understand what the test result 'would' be if your identification is correct, what if it disagrees with your identification
 - iv. Did you check your results in a timely manner (which may be critical for certain tests)
 - v. Did you consider re-doing any tests to check your work
 - vi. Did you do any re-testing to 'confirm' questionable or vague results
 - vii. Did you use your lab exercises, photo atlases, Bergey's, etc for information and understanding
 - 3. A paragraph that discusses your reasoning in making the identification that you did**
 - a. Include your reasoning about why you selected the identity of a particular organism when one or more of your test results DO NOT agree with the known characteristics of the known organism
 - b. Consider the various biochemical tests in 'tandem' (i.e., comparing by 2's &/or 3's)
 - i. Are there any that 'support' each other in determining the identity
 - ii. Are there any that make it clear that they couldn't exist together in the organism
 - iii. Consider the mechanisms of action for metabolism, biochemistry of the organisms
 - iv. What is the purpose of each test, i.e., how, why, when as well as your decisions on how you narrowed it down to genus and species
 - 4. A brief discussion on information about the genus and family of your unknown**
 - a. Characteristics, clinical significance, habitat
- NOTE: you must include references for the information you use in the report**
- 5. The 'Laboratory Data Sheet – Bacterial Unknown' page 31-32**
 - a. Photocopied from your lab manual and filled out
 - 6. 'Form-ID of Unknown and Known'**
 - a. List the pos/neg results of your unknown
 - b. List the pos/neg characteristics of the 'known' organism you think your unknown 'matches' use the dichotomous key for the 'known' organisms information
 - 7. An agar plate with your unknown bacterium streaked in pure culture (that is, well isolated colonies are visible)**
 - a. On Wednesday August 5, streak an agar plate