

BIO101-01 Virtual Lab Worksheet—Week of February 16, 2004

1. In this virtual lab experiment, you are a pathologist who works in a local research hospital. What of the purpose of this experiment and what are the steps that you have to take in order to accomplish this task?

2. What is 'PCR' and how does it work? List the ingredients, the required steps, and identify one unique attribute of the DNA Polymerase used in PCR.

3. The primers used in the PCR will amplify the 16S rDNA from almost any bacterial species. Explain what a primer is and why 'universal' primers can be used to identify *different* bacterial species.

4. What are dideoxynucleotides and in what step(s) are they used in this experiment?

5. Describe what a BLAST search is and give the identification of the bacterial sample you sequenced in this lab.