

## PRE-LAB LAB 2: BASIC TECHNIQUES

*This is the pre-lab assignment. Complete it after reading through the lab. The purpose is to help you be organized and prepared for the lab.*

In the lab, we make either chemically defined or complex media. Media is also either a broth or agar (so the options are defined agar, defined broth, complex agar, complex broth). To help you keep these terms straight, complete the following table.

Medium type	Preparation notes	Sterilization method
Defined		
Complex		
Broth		This is dispensed into tubes _____ autoclaving.
Agar		This is dispensed into plates _____ autoclaving.

10 marks

## LAB 2 MEDIA WORKSHEET

### Questions

Which media did you make in the lab: \_\_\_\_\_

1. What would happen if you autoclaved your media then let it cool to room temperature before trying to pour it? **1 mark**

2. Calculation: Show your work for how much media powder you mixed with water. Include units in your answer. If you didn't make media in the lab, then use the posted media on FOL and show the calculation for making 400 ml. **2 marks**

3. Will your culture medium be a broth or solid once completed? How did you determine this? **2 marks**

4. How would you make a  $10^{-1}$  dilution with a 5 ml final volume? **3 marks**

Solution	Volume	Pipette used to measure
Dye		
Water		
Final Volume	5 ml	

6. Dilution exercise: How did your dye absorbance compare to the expected values (this is the accuracy)? **SHOW YOUR WORK 1 mark**

Average of your absorbance value	
Expected value	
Percent error	

7. Pipetting exercise: How precise was your pipetting technique? **SHOW YOUR WORK 1 mark**

Pipette used	Expected volume ( $\mu\text{l}$ )	Pipetted volume ( $\mu\text{l}$ )	Percent error
<b>P1000 pipette</b>	1600		
<b>P200 pipette</b>	300		
<b>P20 pipette</b>	60		