

GMB I Worksheet. Due at the start of your next lab.

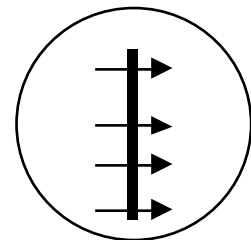
Name _____ GSI & Sect # _____ Station # _____

1) In lab you purified plasmid DNA from an overnight culture of bacteria. What was the number of your culture?

2) Using your onion tip squash, draw and identify the following stages of the cell cycle: interphase, prophase, metaphase, anaphase and telophase.

3) Using the demonstration microscope please draw a cell in prophase I of meiosis and label crossing over.

4) In the following diagram of yeast matings indicate where a diploid condition exists in a given mating (4 matings are shown with the direction of streaking indicated with an arrow).



5) Are yeast cells prokaryotic or eukaryotic? Are *Escherichia coli* cells prokaryotic or eukaryotic? Which might be best for studying mammalian genes?

6) DNA Sequencing: Read the sequence of the gel (of the photocopy) and write below. Indicate 5' and 3' ends.

Provide the 25 nucleotide sequence present in the copy of the autoradiogram that you analyzed.

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Nt																									

Which end represents the 5' end of the sequence? Explain your answer.

GMB I Notes