## Name \_\_\_\_\_

Pre-Lab: Molecular Phylogeny

- 1) You will be looking at variation in the amino acid sequence of the protein cytochrome c. Look up cytochrome c in *Campbell*. In which biochemical pathway does cytochrome c participate? Briefly describe the role of cytochrome c in this pathway.
- 2) Given the following data for organisms alive today:

<u>Pair</u>	# of differences
A–B	20
В-С	20
A–C	4

Draw a phylogenetic tree relating organisms A, B, and C. Show the relative distances between organisms. See pages MolPhyl-6 and -7 for an example.

3) A whale is a mammal, not a fish. Based on this, where would you expect to find the whale on the following phylogenetic tree? Circle your answer.

