Name _____

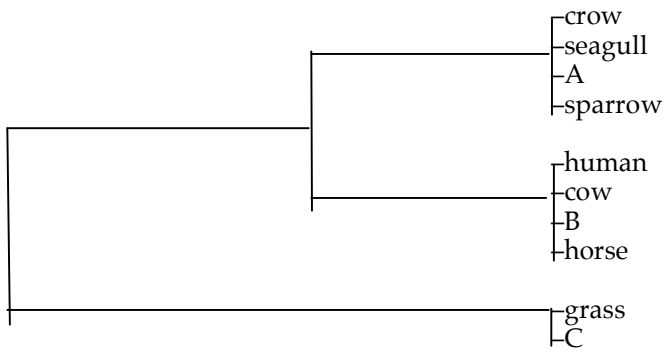
Pre-Lab: Molecular Phylogeny

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:

Pair	**# of differences**
A–B	20
B–C	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 flying squirrel is a mammal, not a bird. Based on this, where would you expect to find the flying squirrel on the following phylogenetic tree? Circle your answer.

position A position B position C