CORRELATION EXERCISES HOMEWORK

Name

1. A and B. In the two examples below, use pencil to correlate the rock units in one column to the other. The column is labeled with the environment of deposition, which will reinforce the idea of facies change (lateral changes in environment). The "strand" refers to a beach.



a. in exercise 1A, which column was deposited closer to land, the column on the left or the one on the right? There are 3 reasons why you might think this. What are they?

2. in the following exercise you should first complete a lithostratigraphic correlation (using black pencil) and then complete biostratigraphic correlations. Use a different colored pencil for each fossil type.

There is an angular unconformity within section 3, between sandstone and dolostone. There is also an igneous intrusion near the base of sections 1 and 2. Both the unconformity and intrusion pinch out laterally.



3. complete a lithologic correlation (using black pencil) of columns A through D and then biostratigraphic correlation, using a different colored pencil for each fossil.



a. is the basal nonconformity the same age in all columns? How do you know?

b. is the contact between the basal conglomerate-sandstone unit and the overlying shale the same age everywhere? How do you know?

c. do you think the basal conglomerate-sandstone unit in column D represents the same amount of time, less time, or more time than the same unit in column A? Why?