JMP - Tables Menu Exercises

Tables/Join
Files :   Join Example pH.jmp, Join Example Viscosity.jmp
Make one table that combines the pH and viscosity data such that each measurement can be analyzed using a Fit Y by X analysis by RunID
1. Which pairs of columns need to be added to the Match Columns area of the Join dialog box?
2. What does "Merge Columns of the Same Name" do to the output?
3. What does the "Match Flag" option do? (Hint: Try adding an additional row with a new RunID to one of the files)

Tables/Concatenate
Files: Concatenate Example_Testing Day 1.jmp, Concatenate Example_Testing Day 2.jmp
Make one table that combines the Day 1 and Day 2 test data.
1. How does Concatenate handle the **Length_mm** column that is only in Day 2 data?
2. What is the benefit of creating a Source column?
3. Does the column order affect the result? (Hint: try selecting a column and choose Cols menu / Reorder Columns to test a variation in one of the files)

Tables/Summary
File: Summary Example.jmp
Create summaries of the data overall and putting RunID in the Group area of the dialog box
1. What is the overall average **Residual_mg** and **BasisWt_gsm** (all rows)?
2. What are the overall standard deviations?
3. What are the average BasisWt_gsm by RunID? (Hint: put RunID in Group)

Tables/Update
Files: Update_Child Table.jmp, Update_Parent Table.jmp
Use Child Table.jmp to update Parent Table.jmp –treating Parent as a master file.
1. How does the Ignore Missing option affect the result post-update?
2. What does the Match Columns option do (hint, try clearing the Update dialog's Match columns and then sort the Child table by just SampleID -- how does this affect the updated table)

Tables/Stack
File: Stack Data.jmp (Stacked Data_Finished Example.jmp shows desired final result)
Create a table that lets you analyze all of the pH data by RunID <u>using one Fit Y by X</u> menu command
1. How could you use the Find/Replace command to have the final SampleID column contain just the integer Sample ID's (1,2,…)?

Tables/Split
File: Split Data.jmp (Split Data_Finished Example.jmp shows desired final result)
Create a table that lets you separately analyze pH, Viscosity and Peak Load using Fit Y by X analyses for each.

Watch out: This one is tricky. You need to specify **RunID** and **SampleID** as **Group** variables to get a correct Split. Otherwise, the split is by row number which can cause an error (See Rows 1 and 2 SampleID reversed)
1. What happens if you don't put RunID and SampleID in Group (check the pH results carefully in the Split table!!)