# EXCEL FOR GENEALOGIST CLASS EXERCISE

# **PURPOSE**

This exercise uses a spreadsheet with fake data that tracks four families. The spreadsheet holds information on everyone's birthdate, birthplace, death date, death place and who has a birth or death certificate in your files. This spreadsheet will be used to practice many Excel functions. These lessons are a mixture of beginning and intermediate difficulties.

# From this spreadsheet you will:

- 1) Track which Birth Certificates have been obtained.
- 2) Track which Death Certificates have been obtained.
- 3) Where to research next for missing certificates.
- 4) How old was everyone at time of death with, using two methods.
- 5) Calculate average death for the group.
- 6) Look for patterns in the data.

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# **BEGIN THE EXERCISE**

- Open the Excel file called "Class Exercise".
- Go to the first tab called "Start Here".
- > Enter the following data on the first row.



CELL	HEADER
A1	Full Name
B1	Sex
C1	Birthdate
D1	Birth City
E1	Birth State
F1	Birth Country
G1	Birth Cert
H1	Death Date
l1	Death Cert
J1	Death City
K1	Death State
L1	Death Country
M1	Death Age

These are the Headers for your spreadsheet.

- > Select all the headers by clicking in A1.
- ➤ Hold the left mouse button down as you drag the cursor to M1.
  - o All Headers cells are now highlight in grey.
- Format these cells with a color background of your choice.
- > Enter the next row of data.

CELL	DATA
A2	Jan Desert
B2	F
C <sub>2</sub>	21-Oct-1900
D <sub>2</sub>	Moscow
E2	
F <sub>2</sub>	Russia
G2	
H <sub>2</sub>	4/17/2009
l <sub>2</sub>	Υ
J <sub>2</sub>	San Francisco
K2	California
L <sub>2</sub>	USA



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Are all the header text and data visible? No. The birthdate only shows as #####. The width of each column is too narrow to show all the information entered.

### LESSON: AUTO-SIZE COLUMNS

- > Highlight the entire table by clicking the intersection of Rows and Columns.
  - O This is the triangle right of "A" and above "1".
- Move the cursor over one of the dividing lines between column headings until it changes shape to look like the image on the right.
- Without changing your position, double click the left mouse button.





# What Happened?

All the columns expanded or shrank in width to fit the data.

By selecting the entire table in advance, the entire table was auto-sized. If the entire table was not selected, then this technique can be used to auto-size individual columns.

This also works for auto-sizing rows, by placing the cursor on the dividing line between any 2 rows.

### **NEXT SPREADSHEET**

In the interest of time the rest of the data has been typed in for you on the next spreadsheet entitled "CLASS EXERCISE". This is where the remaining exercises will take place.



# LESSON: FORMAT PAINTER

In this new spreadsheet you will notice the column headers do not have the formatting you created in the previous page. It is easy to copy these formats to this new page.

- Go to the START HERE tab.
- Select any header from A1 to M1.
- ➤ Click on FORMAT PAINTER
  - This copies the formatting and stores it in the background.
- Go to the Class Exercise page.
- ➤ Highlight the entire Header row from A1 to M1 all at once.
  - o Do not let go of the mouse button until all cells are highlighted.
- Let go of the mouse button.

# What Happened?

The formatting from the first spreadsheet was duplicated on the Class Exercise spreadsheet. No need to reapply the formatting to each individual cell.



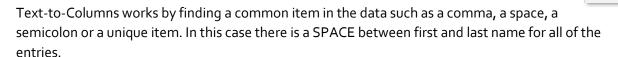
### LESSON: TEXT TO COLUMNS

Can you sort this spreadsheet by surname? No. The data is not in the correct format for a surname sort. The data is only presented as First Name then Last Name in one field.

The Text-to-Columns Excel function allows data from one column to be split into one or more columns based on a common criterion in the data.

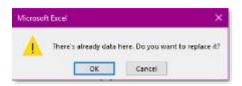
We will first do this wrong, then we will do it right. Doing things wrong in Excel teaches the requirements the functions. You can always recover from error using UNDO.

- Highlight Column A by clicking on the "A" heading.
- Go to the DATA Ribbon.
- > Click on the Text to Columns button.



- On the first dialog window select DELIMITED. (This may the default selection.)
- Click NEXT.
- > On the next dialog window
  - o De-select TAB, which is the default.
  - Select SPACE. As you do this notice how the view in the lower window changes. This is a preview of how the data will be split. Scroll up and down in this view. If this splitting looks correct...
- Click FINISH

You will see this warning box...



For now, click OK. This is the Wrong action and we will see why.

# What Happened?

- Column A split into column A & B. Placing first names into column A and last names into column B.
- The column headers also split.
  - Column A has the header of FULL.
  - Column B has the header of NAME.
  - These headers do not make sense.
- Most alarming, the Sex data has been overwritten and is gone.



Text to

Columns

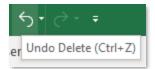
When splitting data into one or more columns with the Text-to-Columns function, the adjacent columns on the right must be free of data. If not, then the data to the right will be overwritten.

Making errors in Excel can be very educational if you can recover from the error and know why it happened.

### LESSON: UNDO

Click the UNDO button.

The UNDO button is at the very top of the Excel window, in the colored header. It looks like a back arrow. Alternatively, you can type CTRL + Z. This also activates the undo function across all Microsoft products.



Each time you click UNDO the previous action will be reverted.

### What Happened?

- The Full Name data was restored in column A.
- The Sex data reappeared in column B.
- Nothing was lost or permanently altered.
- You've recovered from the error and learned how to UNDO.

### LESSON: INSERT COLUMN

- Click on the B column. The entire column will highlight in gray.
- Right click the same location to bring up the Right-Click menu.
- Select INSERT. As you mouse over each item it will gain a gray background. This is how you know what you have selected.

# What Happened?

A new blank column appeared as the new column B. All data was shifted over to the right. This new column does not have a header.

Inserting ROWS works the same way. Explore right-clicking on a row heading and the same menu will appear.



To insert multiple columns:

- Left click on Column D.
- ➤ HOLD the mouse button down while dragging to Column F.
  - o Four columns are now selected.
- Right click anywhere on the highlighted headings to bring up the Right-Click menu.
- Select INSERT

### What Happened?



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Four columns were inserted. The insert function will insert the same number of columns (or rows) that were selected. The insert always happens *before* of the selection, pushing columns to the right or rows down.

➤ UNDO or Ctrl Z.

Return to Page 3 and repeat the steps for Lesson: Text-to-Columns.

### What Happened?

The FULL NAME data was split into Column A & Column B. Nothing was overwritten. The Overwrite warning did not appear this time.

- > Rename the column headers
  - o Rename Column A FIRST NAME
  - o Rename Column B SURNAME

### LESSON: SORTING

Now that the SURNAME has been separated from the FULL NAME, sorting by Surname is possible.



On the DATA Ribbon select the SORT button and the following dialog box will appear.



- > Click in the first field and select Column B from the dropdown menu.
- Click on ADD LEVEL button to add another sorting criterion.
- Click in the first field of the newly created row and select Column A from the dropdown menu.
- Click on the checkbox "My data has headers"
  - Once this checkbox is checked note that the sort columns change from Column B and Column A to Surname and First Name.
- Click the checkbox "My data has headers" to indicate HEADERS on the top row.
  - o This will prevent the headers from getting mixed in with the data upon sorting.

Add as many sort criteria as needed by clicking the  $\frac{1}{1+\Delta dd \ Level}$  button.

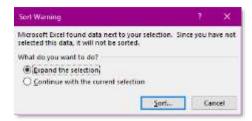


The middle section allows "Sort On" by Cell Value as a default. But sorting can also happen on "Cell Color", "Font Color" or "Conditional Formatting".

The third section, ORDER, is used to sort by A to Z or Z to A, smallest to largest or largest to smallest.

By selecting OPTIONS button, the sort orientation can be changed to "Left to Right", which allows sorting by row.

Sort an entire spreadsheet together. If only one column in a set is selected, you will see the following warning sign.



"Expand the selection" (default) will insure that all the data is sorted together. If "Continue with the current selection" is chosen, then only those columns selected will be sorted. This can lead to a great error of corrupted data. For example, if only the birthdate column is sorted, apart from the other columns, then everyone's birthday will change and be incorrect. If you happen to make this mistake, simply UNDO as many times as necessary to restore the data.

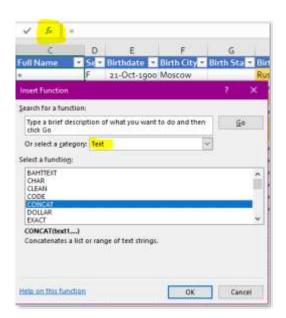
### LESSON: CONCATENATE

Notice the Text-to-Column function replaced the full name in the first column with only the first name. I would like to see the full name restored while keeping the first name and surname separate, still. The Concatenate function allows data from one or more columns to be joined together.

- Insert a new column C. (You know how to do this now – see page 5)
- Give the new column the header "Full Name".
- Click into cell C2.
- Click the fx button. This stands for Insert Function. The following dialog window will appear.

Excel offers 100's of pre-programmed functions that will do special calculations, data manipulations and other magics. The functions are extremely valuable for Finance, Statistics, Dates & Times, Maths and more. These are worth exploring on your own. Do not be afraid to make mistakes while exploring and learning.

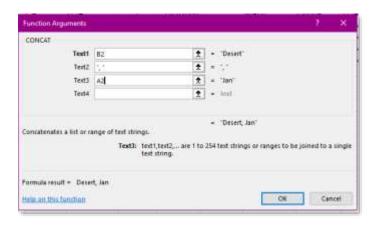
 Use the dropdown menu to select TEXT functions.





- Scroll to find the CONCAT option. Click on it to select it.
- When the dialog box appears click in the first field, called Text1, then click on B2. This put the value of B2 into the concatenation formula.
- ➤ In the next field, Text2, type ", ". That is quote comma space quote.
- Click into the next field, Text3, then click on A2. This put the value of A2 into the concatenation formula.
  - o Alternatively, you can type in B2 or A2. This will have the same effect.

The CONCAT dialog window should look exactly like this screenshot.



Click OK.

### What Happened?

The values in cell A2 and B2 were combined with the surname first, followed by a comma and a space, then the first name. The Concatenation function is powerful in putting data together into one cell.

# LESSON: FILL - DOWN (OR RIGHT)

Now that the Full Name has been restored, copy the concatenation formula to all the other rows.

- ➤ Select cell C2.
- ➤ Hold the left mouse button down and drag down to the last row with data, C13.
- > Type CTRL + D. (That is the Control Key, below the shift key and the letter D. I think of this as Control Down.)

# What Happened?

The concatenation function was applied to all the rows. All rows now have the same format for a Full Name.

The FILL function can also be applied across the spreadsheet by using CTRL + R. (I think of this as Control Right.)

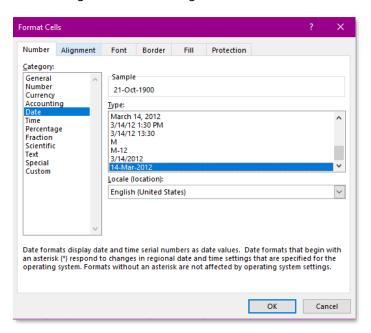
### LESSON: FORMATTING CELL VALUES - DATES

Look at column E that stores Birthdate information and notice the several different date formats. Some exacting and fussy genealogists would be driven mad by this lack of uniformity. Excel offers many date formats to choose from.

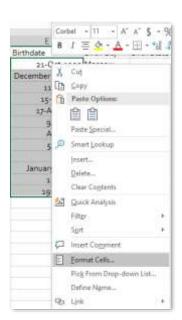
- ➤ Select all the date from E2 to E13 with the mouse. (You've done this in previous steps.)
- Note date for Diego Mountain in E8 is April 1911. (Yellow cell)
- Note date for Forest Mountain in E10 is 1933. (Yellow cell)
- Right click on the selected area to bring up the Right-Click menu.
- On the menu select FORMAT CELLS...

The FORMAT CELLS dialog window will appear. Note there are 6 different tabs that are worth exploring on your own.

- Numbers tab format the contents of cells by number, currency, date, time, percentage, fraction, text, special and custom.
- Alignment tab orient text direction inside the cell, horizontal and vertical alignment of text, wrapping text, merging cells.
- Font tab select the font of each cell, size of font, color of text, strikethrough, etc.
- Border tab apply border to cells and spreadsheets.
- Fill fill in cells with color or patterns.
- Protection allows locking of cells and hiding of formulas.



- On the NUMBER tab, select DATE.
- Note the several kinds of formats available for dates.
- Scrolls to the bottom of the list to find the genealogical date format of dd-mmm-yyyy.





Click OK.

# What Happened?

All the dates were converted into a uniform format of dd-mmm-yyyy. But notice the dates in E8 and E10. Is the formatting for these two dates correct? No, it is not.

E8 originally read as April 1911. Excel has assumed the 1<sup>st</sup> of the month because no day was previously given. This can lead to genealogical errors in the future. UNDO will revert all the dates to their original messy formats. Instead of undoing all change, we will only reformat this one cell.

- > Right click on E8 to bring up the Right-Click menu.
- Go to FORMAT CELLS.
- The date tab should open, showing the currently selected date format.
- Click on the CUSTOM options.
- In this section find the "mmmm yyyy" option.
  - o Or type in the TYPE: field "mmmm yyyy"

# What Happened?

Visually the date reverted to "April 11". Excel will still require a full date and retains the value of April 1st in the background. Calculations based on this date will be based on April 1st and therefore may not yield results that are genealogically exact.

Date Formatting Options and Display Outcomes			
mm	01, 02, etc.		
mmm	Jan, Feb, etc.		
mmmm	January, February, etc.		
уу	17, 18, etc.		
уууу	2017, 2018, etc.		
d	1, 2, 3, etc.		
dd	01, 02, 03, etc.		

E10 originally read as 1933. Now it says "16-Apr-1905". This is incorrect. Excel transforms all dates into a numeric value based on 1-Jan-1900 being equal to 1. In this example Excel has interpreted 1933 as being one thousand, nine hundred and thirty three days after 1-Jan-1900. This would be a very serious error to allow into our records.

- Right click on E10 to bring up the Right-Click menu.
- ➢ Go to FORMAT CELLS.
- The date tab should open, show the currently selected date format.
- Click on the GENERAL option.

### What Happened?

The value of 1933 is no longer considered a date, but a simple number. Calculations are still possible with this number, though the results will not be genealogically exact.

### LESSON: CONDITIONAL FORMATTING

Displaying data with different formats, fonts, font colors, background colors allows the reader to more quickly identify patterns. In this exercise we will highlight all birth countries that are *not* the USA.

Conditional Furmatting

Highlight Cells Rules \*

Top/Bottom Rules

Data Bars

Color Scalos

Jon Sets

Mew Hule...

Chur Rules

Manage Bales...

Greater Than...

Less Than...

Between...

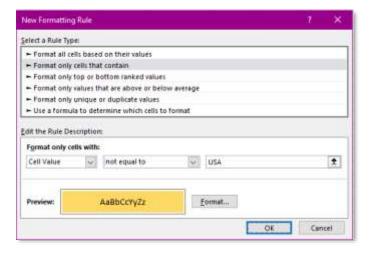
Lext that Contains.

A Date Occurring...

DupScate Values

More Bules.

- Select column H for Birth Country.
- Select CONDITIONAL FORMATTING from the HOME Ribbon.
- Go to HIGHLIGHT CELL RULES
- Note the options: You can highlight cells that are greater than, less than, between, equal to, etc. for whatever criteria you set.
- ➤ There is no option here for NOT Equal to, therefore go to the last option of MORE RULES...
- In the next window, in the middle field, select from the dropdown menu "not equal to".
- In the third field type in USA
- Click the FORMAT button.
- Click the FILL tab.
- Select any color you wish. (Except black or anything else too dark, because then you will not be able to see the black text against a dark background.)
- Click OK.
- Click OK again.



# What Happened?

The cells containing Russia, Columbia, China and India now have background colors of your choosing. However, Birth Country and every blank cell below our data is also colored in. To avoid this error in the future, do not select the entire column, only the range of cells that need Conditional Formatting. Note the many Conditional Formatting options for you explore on your own.



We want to modify the conditional formatting so that it applies only to our data cells and not the entire column.

- Select Column H.
- > Select CONDITIONAL FORMATTING from the HOME Ribbon.
- Go to the last option, MANAGE RULES...
- Click in the "Applies to" field. It currently says =\$H:\$H, which means the entire H column.
- > Select cells H2 to H13 with the mouse.
  - Note the value changes from =\$H:\$H to =\$H\$2:\$H\$13.
- Click OK.

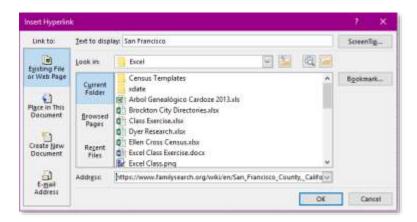
### What Happened?

The conditional formatting is now restricted to row inside the data set. The Header and all the empty rows are now back to having no color. If new rows are added, the conditional formatting range will need to be increased past cell H<sub>13</sub>.

### LESSON: HYPERLINKS

Excel allows for Hyperlinks to internet sites. This can be extremely helpful to quickly return to sites where you originally found a source.

- ➤ Right click in L2 to bring up Right-Click menu.
- Click on the last item on the menu, LINK.
- In the ADDRESS field, type or paste in a URL of your choice.
- For this exercise type in "<a href="http://www.familysearch.org".">http://www.familysearch.org</a>.
  - It is easier to Copy URLs from the Browser, then Paste them into the ADDRESS field, rather than type manually.



### What Happened?

The text in cell L2 changed to a hyperlink with a blue font and underlined, which is standard formatting for a hyperlink. Clicking on this link will open a web browser and launch the FamilySearch site. Link can also be found on the INSERT Ribbon.

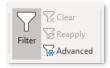




### LESSON: FILTER

Filtering is a very powerful Excel tool used to select data you want to see and data you'd like to hide. Filters can be applied to a list of items in the column, by color of the cell, by conditional content.

- Click anywhere on the data.
- On the DATA Ribbon click the FILTER button.
  - Notice the CLEAR button on this menu. We will use this function often.



# What Happened?

All the headers from column A to column O now have dropdown arrows indicating these columns are now filtered.

- Click on the dropdown arrow in column D (Sex).
- Click on the top box (Select All).
  - o By unchecking this box, all values are unchecked.
- Click on the F checkbox.

# What Happened?

Only the females appear on the spreadsheet. Anyone who is not female is hidden.

Notice at the very bottom left corner of Excel it now says "5 of 12 records found". This is a helpful and quick count of how many records fit the filtering criteria.

- Click the CLEAR button. This is next to the bigger FILTER button.
  - o This removes all filters from all columns, restoring data to the original view.
- Click the dropdown arrow for column H (Birth Country).
- Mouse down to Filter by Color and hover there for 2 seconds. A right side menu will appear showing colors existing in the column.
- Click on the color.

# What Happened?

Four rows are now displayed that had a color background. Note in the lower right corner the count now reads "4 of 12 records found".

- Click the CLEAR button. This is next to the bigger FILTER button.
- Click on the dropdown arrow for column E (Birthdate).
  - Note that for dates, Excel will group items by years, then months, then days.
- > Open the 1922 filter by clicking on the small + next to the checkbox.
  - o 1922 expands to show new filter options for May & December.
- Click CANCEL





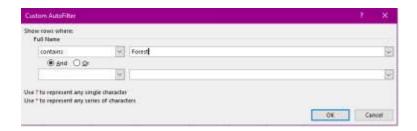
Z | Sort Newest to Oldest

Sent by Culor



We will not apply this filter, but you are now familiar with DATE filtering options. Dates prior to 1900 will not be grouped together since Excel does not recognize these as dates, instead the filter option will be listed for each "text" variable.

- Click on the dropdown arrow for column C (Full Name).
- ➤ Mouse to TEXT FILTERS...
- ➤ Hover until the Right side menu appears.
- Select CONTAINS...
- In the dialog box that appears, type in "Forest" in the first field as shown below.
- Click OK.



# What Happened?

There are 4 of 12 rows showing. Anyone in the data set with "Forest" as part of their Full Name is displayed, while all other rows are hidden. Filtering by content is a powerful tool that you should explore further on your own. Note that filters are available for Text that is "Equal to", "Not Equal to", "Begins with", "Ends with" and several other options.

- Click on the dropdown arrow for column K (Death Cert).
- ➤ Uncheck the "Y" box so that only the "(BLANKS)" checkbox is active.

### What Happened?

There are 6 of 12 rows showing. This filter show rows that *do not* have a Death Certificate. Where do you need to focus research to obtain these missing documents? San Francisco and Miami.

Click the CLEAR button.

### LESSON: CALCULATIONS WITH DATES AND AVERAGES

One of the most valued functions in Excel is the ability to perform complex calculations over 1000's of cells in an instant. Genealogist can benefit from calculating ages, years between events, average property values on a census page, minimum and maximum tax collected in a Tax Roll record. If you can imagine the need for a calculation, Excel will be able to do it.

In this exercise we will calculate the age at death using two Excel methods.

- Click into Cell O2 (Death Age).
- > Type the following
  - o = (equal sign)
  - O Click on J2



- (subtraction sign) 0 -
- o Click on E2
- Enter

Excel did a subtraction calculation using the Death Date less the Birth Date. Remember that Excel translates all dates into a number code, with 1-Jan-1900 being equal to 1. The calculation you just performed gave the result of 39625. There are 39,625 days between Jan Desert's birth and death.

Information in Days is not very helpful to a genealogist. We need to convert the number of days into years by dividing by 365.

- ➤ Click cell O2.
- Click into the Edit field.
- Add parenthesis around your current formula.
- > Then append the following
  - 0 /365
  - o Enter

Remember from Math class that calculations inside parenthesis are done first, followed by any calculations outside.

The calculation formula should have changed from  $=J_2-E_2$  to  $=(J_2-E_2)/365$ .

# What Happened?

The value in cell O2 changed to 109. Is this correct? Yes, Jan Desert died at the approximate age of 109 (2009 minus 1900).

- Select cell O2 to O13 by holding the left mouse button and dragging over the cells.
- ➤ Type CTRL + D
  - o Remember this fills in your calculation or formats to other cells.
  - This saves time and avoids having to retype formulas into each cell.
- Click in cell O15.
- > Type in
  - o =average(
  - Drag the mouse over cells O2 to O13
  - Enter (Excel will automatically add the closing parenthesis)

# What Happened?

The value of 57 appears in cell O15. This is the average of the values selected.

- Click in cell O16.
- > Type in
  - o =min(
  - Drag the mouse over cells O2 to O13



- Enter
- Click in cell O<sub>17</sub>.
- > Type in
  - $\circ$  =max(
  - o Drag the mouse over cells O2 to O13
  - o Enter

In Cell O16 now shows the minimum age of death for this data set. In Cell O17 now shows the maximum age of death for this data set. You should see 20 and 109, respectively. You may want to type in labels in adjacent cells so that you do not forget what these values mean.

For genealogy I like using more specific date calculations that tell me the year, month and days for a person at the time of death. We sometimes find these same values on a death certificate.

- > Start a new column by typing "DATEDIF" into P1.
  - Note that filters are not available for P1 since this header was created after filters were applied.
  - o To include column P into Filter, simply toggle OFF and then ON the filter button.
  - o Note that Excel carried over any Header formatting you had applied in other columns.
- Click in cell P2 and type the following...
  - o =DATEDIF(
  - o Click on E2
  - 0
  - o Click on J2
  - 0
  - o "y"
  - o Enter

# What Happened?

The value of 108 appeared in cell P2. This is a more accurate count of years from the previous calculation in column O because the DATEDIF function accounts for months and days between the two dates.

The format for the DATEDIF function is...

=DATEDIF(beginning date, ending date, unit to calculate in quotes)

Unit	Meaning	Explanation
Υ	Years	Number of complete years between the start and end dates.
М	Months	Number of complete months between the dates.
D	Days	Number of days between the start date and end date.
MD	Days excluding years and months	The date difference in days, ignoring months and years.
YD	Days excluding years	The date difference in days, ignoring years.
YM	Months excluding days and years	The date difference in months, ignoring days and years.

With the DATEDIF calculation method a label can be appended to the formula, such as "years", "months" or "days".

- Click in P2
- Click in the Edit field and type the following
  - Space
  - 0 &
  - 0 "
  - Space
  - o Years
  - 0 "
  - o Enter
- Fill down your calculations from P2 down to P13. (You've done this before.)

### What Happened?

Column P now holds age at death in years with a Year label following the calculated value. Seven of these calculations are more accurate with this new method. See P2, P5, P6, P7, P8, P9 and P10.

If you have interest, append the same label onto the calculation in cell O2. The calculation should read as = $(J_2-E_2)/365$  & " years". What happened – the value became decimalized, but without a label of "years".

The DATEDIF function allows for calculations to be strung together.

- Click in cell P2.
- Click in the Edit field.
- > Transform the existing calculation to look like this.
- Fill down the changed formula from P2 to P13.

```
=DATEDIF(E2, J2, "y") & "years, " & DATEDIF(E2, J2, "ym") & " months, " & DATEDIF(E2, J2, "md") & " days"
```

This formula looks formidable and scary. Let's break it down to its components. The ampersand "&" tells Excel to add something more. The first part of the formula calculates YEARS between the beginning date and the ending date. This is followed by an ampersand then the label for years in

quotes. Note there is a space before and after the words 'years'. If these spaces are missing, then the numbers and labels will run together. (Try it without the space to see what happens.)

An ampersand precedes the next calculation for MONTHS with a month label, with spaces, appended. Lastly, the same formatting is repeated for the DAYS calculation. Breaking down the formula visually may help with understanding all the components.

- Fill down the new calculation from P2 to P13.
- Auto-size column P. (See lesson on page 2.)
- > Left justify column P. (optional)

Note the values for Diego Mountain and Forest Mountain will not be accurate since these rows only have partial dates.

### LESSON: INSERT OR COPY A NEW SPREADSHEET

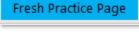
Very often a new spreadsheet will be needed to capture a new data set.

- Right click on the tab labeled "Fresh Practice Page".
- On the menu that appears, click "Move or Copy".
- Check the box "Create a copy"
- Click OK.

### What Happened?

A new spreadsheet was created called "Fresh Practice Page (2). It was inserted in front of all the other sheets. By doing this you can create an infinite number of practice pages to repeat an part of the exercise as many times as you wish.

- Click on the new tabs while holding the left mouse button.
- > Drag the mouse to the right.
  - Note the change in cursor. It looks like a small page is being dragged.
  - As you move to the right, note that small black down arrow appear between the spreadsheet tabs. This indicates where the tab will be dropped if the mouse is released.
- > Drag all the way to the right.
- > Release the left mouse button.

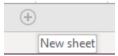




The new tab will now be at the end of the row.

Right clicking on any of the tabs will give you a menu for controlling tab characteristics. From this menu you can rename tabs, change the color of the tab or other functions. Explore this menu on your own.

To create a new blank spreadsheet, use the Right-Click menu or simply click the + sign after the last tab.



### LESSON: TRENDS IN THE DATA

Now that the data is formatted, calculated and linked as you wish, it is time to find patterns to help us tell these ancestors stories.

- Return to the "Class Exercise" spreadsheet.
- > Click on the data table
- Sort the data by First Name from A to Z. (You know how to do this now.)

What trend do you see in the first names?

Each first name starts with a different letter of the alphabet, in order from A to L.

What trends do you see in the death dates?

Each family group died on the same day, but different years. The Ocean family all died on May 25. The Mountain family all died on November 2.

# **END OF LESSON**

I hoped you enjoyed this exercise and learned many of the available tools within Excel. You can return to these exercises as often as you need.

Excel can be a powerful tool for genealogical analysis once you master its functions. There are many many more tools and functions to explore in Excel than the ones shown today. Please take time to explore this powerful software and be fearless about making mistakes.

- > Save the Excel workbook.
- Close the Excel program.

# Thank you.