



Excel 2019

Part 2

Revised January 2020

Excel Part 2 builds upon concepts learned in *Excel Part 1* and assumes familiarity with components of the Excel screen such as the ribbon, scroll bars, and task bar. This class covers setting up and formatting a spreadsheet, sorting and filtering data, auto fill, inserting comments, freeze panes and saving.

Creating a Sheet in a Workbook

Creating Column Headings

Column headings are entered on the first row of the worksheet.

1. Open Excel from the Start menu
2. An Excel start screen opens; click on **blank workbook**
3. In cell **A1**, type **Last Name**; press **Tab** to jump to cell B1
4. In cell **B1**, type **First Name**
5. In cell **C1**, type **Address1**
6. In cell **D1**, type **Address2**
7. In cell **E1**, type **City**
8. In cell **F1**, type **State**
9. In cell **G1**, type **Zip**

	A	B	C	D	E	F	G
1	Last Name	First Name	Address 1	Address 2	City	State	Zip

Data can now be entered on the worksheet.

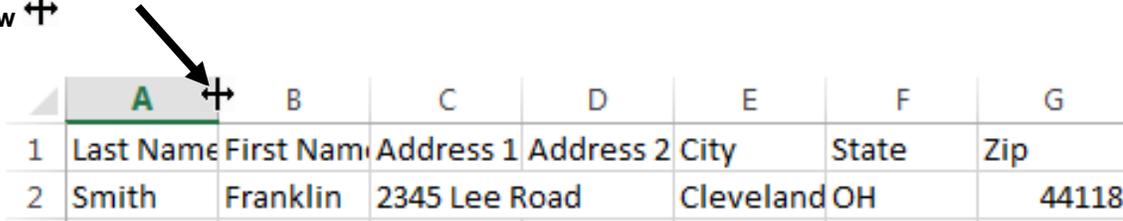
1. Under **Last Name**, type **Smith**
2. Under **First Name**, type **Franklin**
3. Under **Address1**, type **2345 Lee Road**
4. Leave **Address2** blank because it is not needed for this entry
5. Under **City**, type **Cleveland Heights**
6. Under **State**, type **OH**
7. Under **Zip**, type **44118**

	A	B	C	D	E	F	G
1	Last Name	First Name	Address 1	Address 2	City	State	Zip
2	Smith	Franklin	2345 Lee Road		Cleveland	OH	44118

Changing Column Width

All of the text is not visible in every column because the text is wider than the column width, so the column width must be adjusted.

1. Place the cursor over the **column line** in the **column heading** so the **white cross**  becomes a **double arrow** 



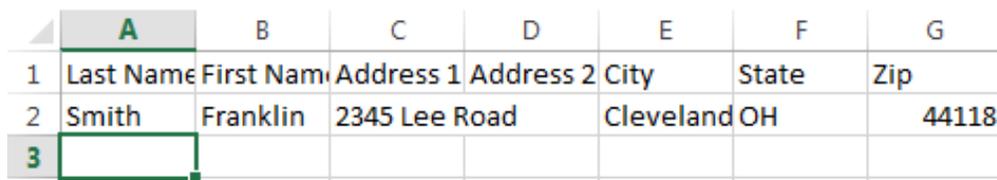
	A	B	C	D	E	F	G
1	Last Name	First Name	Address 1	Address 2	City	State	Zip
2	Smith	Franklin	2345 Lee Road		Cleveland	OH	44118

2. Double-click the mouse; the column widens to fit the longest bit of information in the column
3. Repeat to widen the B, C, D, E and F columns so that all heading text is visible

Copying and Pasting Information from One Excel Worksheet to Another

The first record has been entered in the worksheet. Now we'll **copy and paste** more records into the worksheet to save time.

1. Go to the **File** tab → **Open** (on the left side of the **Backstage view**) → **Browse**
2. Open the Excel file **excel_practice_file.xls** file from the **Documents** folder
3. Move to the **Addresses** worksheet.
4. Select all of the data by clicking and dragging over cells **A2:G39**
5. Go to the **Home** tab → **Clipboard** group → **Copy** command
6. Click the **Book1** tab in the taskbar
7. Click in cell **A3** to make it the active cell



	A	B	C	D	E	F	G
1	Last Name	First Name	Address 1	Address 2	City	State	Zip
2	Smith	Franklin	2345 Lee Road		Cleveland	OH	44118
3							

8. Go to the **Home** tab → **Clipboard** group → **Paste** command

The **Book1** workbook should now contain one row of column headers and 39 rows of names and addresses.

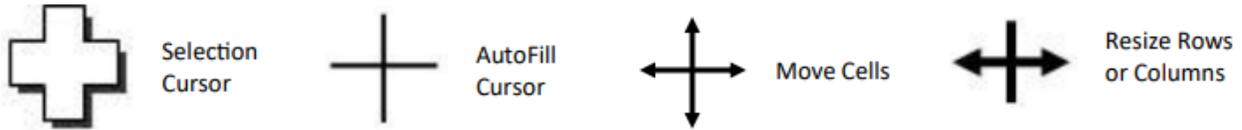
Widen the columns all at once by selecting the entire sheet (**Ctrl+A**) and going to the **Home** tab → **Cells** group → **Format** command → **AutoFit Column Width**.

Two separate workbooks are currently open. Close the **Book 1** workbook. For the remainder of the class exercises will be completed in the **Excel_Practice_File**.

Excel Cursors

In Excel there are three different cursors that appear when you hover on a cell. Be careful, each cursor behaves differently!

Different cursors allow you to access different Excel features.



Using Auto Fill

One of Excel's nicest features is **Auto Fill**, which reduces the amount of typing needed when entering series into a spreadsheet.

Type the first entry or entries and click on the Auto Fill handle (a small black square in the lower right corner of the selected cell or cells). The cursor turns into a plus sign [+]. Hold down the mouse button, drag either down or across, and release the button when the list is complete. Excel automatically fills in the entries for the rest of the series.

	A
1	5
2	10
3	15
4	20
5	25
6	30
7	35
8	40

Practice Exercise: Auto Fill

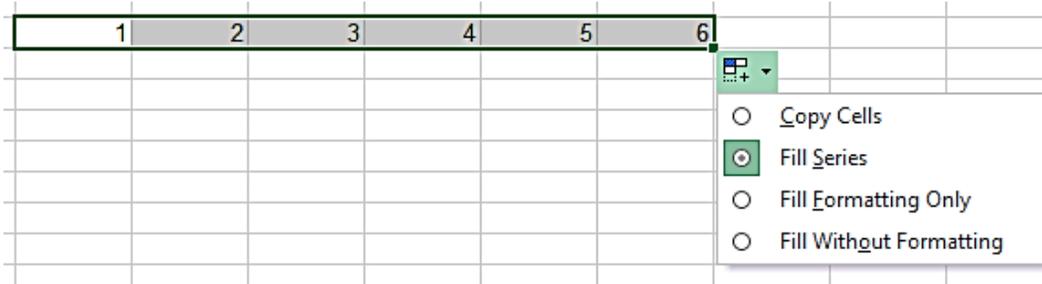
- Click on the **Auto Fill** sheet to make it the active worksheet
- In cell A1, type **Sun**
- In cell A2, type **January**
- In cell A3, type **2014**
- In cell A4, type **Qtr1**
- Select cells **A1** through **A4**
- Place the cursor in the bottom right corner of the selection until the fill handle turns into a small dark plus sign
- Click and drag the fill handle to the right to column **L**; Excel automatically fills the cells

	A
1	Sun
2	January
3	2014
4	Qtr1

	A	B	C	D	E	F	G	H	I	J	K	L
1	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
2	January	February	March	April	May	June	July	August	September	October	November	December
3	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4
5												

9. To choose how to fill the selection, click **Auto Fill Options** button and click the desired options 

NOTE: When using **Auto Fill** with numbers, select the **Auto Fill options** button to either copy the cells or fill the series. Selecting **Fill Series** produces a series of numbers, e.g. 1, 2, 3... Selecting **Copy Cells** will copy the original data etc.



Practice Exercise: Move Cells with Four-Headed Arrow

Use the  cursor to move text to a different location on a sheet.

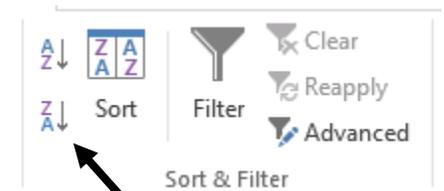
1. In the **excel_practice_file.xls**, go to the **Book Sales** sheet
2. Click on the **E3 cell**
3. Move your cursor to the edge of the E3 cell until you see the four headed arrow 
4. Click and drag the E3 cell to the E4 cell and drop it (let go of the mouse button)

The text from E3 has been moved to the E4 cell

Sorting Data

1. In the **excel_practice_file** select the **Addresses** worksheet, click a single cell in the column by which you want to sort; click cell **A1**
2. Go to **Data** tab → **Sort & Filter** group

- Choose  to perform an ascending sort (A to Z or smallest number to largest)
- Choose  to perform a descending sort (Z to A or largest number to smallest)



3. Click the A-Z arrow to sort by last name in ascending order

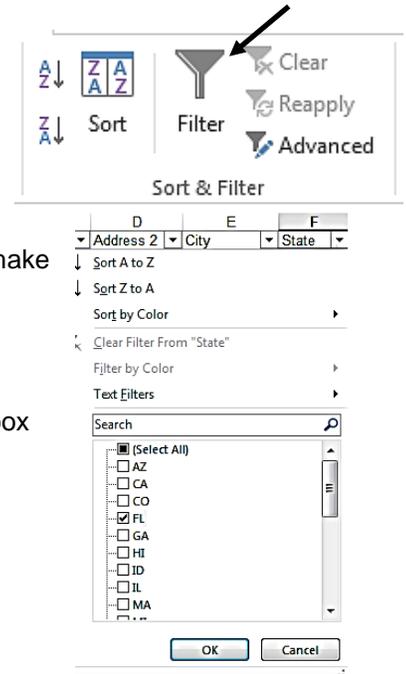
To specify the columns by which to sort:

1. Click a single cell anywhere in the range to be sorted
2. Go to **Data** tab → **Sort & Filter** group → **Sort**

3. In the **Sort** dialog box, under **Column**, select the first column by which you want to sort
4. Under **Sort On**, select **Values**, **Cell Color**, **Font Color**, or **Cell Icon**
5. Under **Order**, select the order that you want to apply to the sort operation—alphabetically or numerically ascending or descending (A to Z or Z to A for text; low to high or high to low for numbers)
6. To add another level by which to sort, click the **Add Level** button and make the selections

Filtering Data

Filtered data displays only rows that meet specified criteria and hides rows that you don't want displayed. After filtering data, the subset of filtered data can be copied, found, edited, formatted, charted, and printed without rearranging or moving it. Data can also be filtered by more than one column. Filters are additive, meaning that each additional filter is based on the current filter and further reduces the subset of data that is displayed.



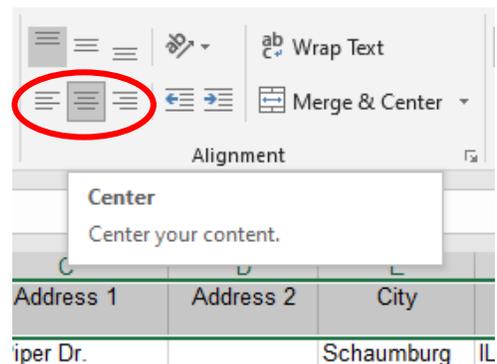
1. In the **excel_practice_file** select the **Addresses** worksheet, click in cell **A1** (make sure that the active cell is in a column that contains alphanumeric data)
2. Go to **Data** tab → **Sort & Filter** group → **Filter** command
3. Click the arrow  in the **State** column header and click the **Select All** checkbox to deselect all states
4. Select the **FL** (Florida) checkbox and click OK
5. Click the arrow in the **State** column header again and select **OH** (Ohio)
6. To remove the filter, click the **Filter** command again to toggle it off

Formatting Cells

Text Alignment

By default, any text entered into your worksheet will be aligned to the bottom-left of a cell, while any numbers will be aligned to the bottom-right. Changing the **alignment** of your cell content allows you to choose how the content is displayed in any cell, which can make your cell content easier to read.

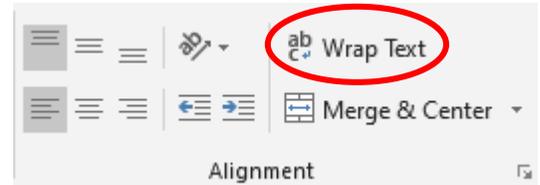
1. Go to the **Addresses** sheet
2. Click on the **Row Header** for **Row 1**
3. Go to **Home** tab → **Alignment** group → **Center**
The text in the selected cells will **center align**



Wrapping Text

When you have too much cell content to be displayed in a single cell, you may decide to **wrap the text** or **merge** the cell rather than resize a column. Wrapping the text will automatically modify a cell's **row height**, allowing cell contents to be displayed **on multiple lines**.

4. Go to the **Addresses** sheet
5. Click on the **C Column Header**
6. Go to **Home** tab → **Alignment** group → **Wrap Text**
The text in the selected cells will **wrap**



* To **unwrap** the text click the **Wrap Text** command again

Merging Cells

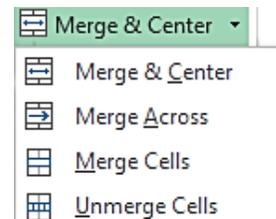
When two or more adjacent horizontal or vertical cells are merged, the cells become **one larger cell** that is displayed across multiple columns or rows.

NOTE: When multiple cells are merged, the contents of only one cell (the upper-left cell) appear in the merged cell; the contents of the other merged cell are deleted.

After merging cells, a merged cell can be split into separate cells.

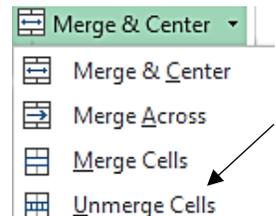
Merging Adjacent Cells

1. Go to the **Book Sales** sheet
2. Select cells **A1** through **C1**
3. Go to **Home** tab → **Alignment** group → **Merge & Center** command arrow → **Merge Cells**



Splitting Merged Cells

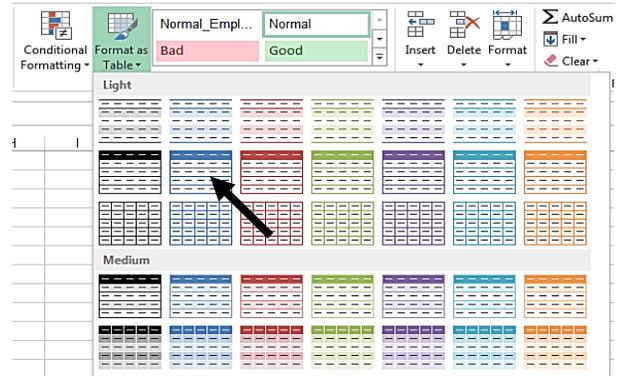
1. Select the merged cell (A1 through C1)
2. Go to **Home** tab → **Alignment** group → **Merge & Center** command arrow → **Unmerge Cells**



Using the Styles Group to Format a Table

1. Select all of the data in the **Addresses** worksheet:
 - a. Click inside the **A1** cell to make it the active cell
 - b. Hold down the left mouse button and drag over and down to the **G39** cell
 - c. Release the left mouse button

- Go to the **Home** tab → **Styles** group → **Format as Table** command
- Select the second thumbnail in the first row of the **Medium** format; the table range appears in the dialog box
- Make sure the checkbox next to **My table has headers** is checked
- Click **OK**



The Addresses worksheet is now a formatted table, allowing the data to be sorted easily.

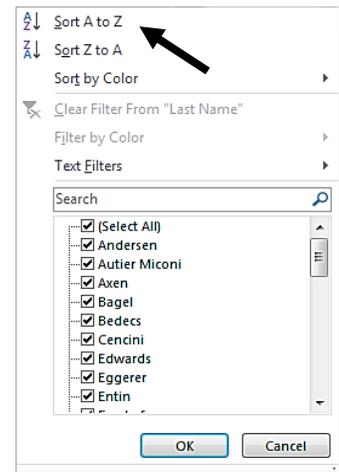
	A	B	C	D	E	F	G
1	Last Name	First Name	Address 1	Address 2	City	State	Zip
2	Bedecs	Ms. Anna	123 1st Street	Suite 2122	Seattle	WA	99999
3	Gratacos Solsona	Mr. Antonio and Ms. Angelina	123 2nd Street		Boston	MA	99999
4	Axen	Thomas	123 3rd Street		Los Angelas	CA	99999
5	Lee	Christina	123 4th Street		New York	NY	99999

Using Table Formatting to Sort Data

Sorting Data by Last Name

- Click the down arrow at the end of the column header **Last Name**
- Choose **Sort A to Z** from the menu

	Last Name	First Name
2	Bedecs	Ms. Anna
3	Gratacos Solsona	Mr. Antonio and Ms. Angelina
4	Axen	Thomas



Excel rearranges the information so that cell A2 holds the last name that comes first alphabetically (Andersen).

NOTE: Excel ensures that all data connected to the last name is kept together.

The down arrow in any column can be used to sort the data. When sorting from Z to A, the data is listed from the last entry to the first entry either alphabetically or numerically.

Keeping Headings in View – Freeze Panes

In larger worksheets, the column headings entered at the top of the spreadsheet disappear from view as the document is scrolled down, but there is a way to keep them visible. Click the cell below and to the right of the headings that should remain in view; anything above and to the left of this cell will be “frozen” in place.

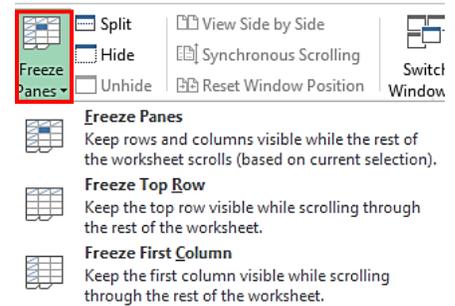
- Navigate to the **Freeze Panes** sheet
- Click in the **B2** cell to make it the active cell

	A	B	C
1	ID	Last Name	First Name
2	1001	Hall	Elizabeth

- To freeze both rows and columns, click the cell below and to the right of the rows and columns that you want to keep visible when you scroll.
- To freeze rows, select the row below the row or rows that you want to keep visible when you scroll.
- To freeze columns, select the column to the right of the column or columns that you want to keep visible when you scroll.

3. Go to the **View** tab → **Window** group → **Freeze Panes** command → **Freeze Panes**

- To freeze both rows and columns, click the cell below and to the right of the rows and columns that you want to keep visible when you scroll.
- To freeze rows, select the row below the row or rows that you want to keep visible when you scroll.
- To freeze columns, select the column to the right of the column or columns that you want to keep visible when you scroll.



Scroll through the sheet. Observe that **Row 1** is always visible when you scroll up and down the worksheet. **Column A** is always visible when you scroll to the right.

To unfreeze the panes, go to the **View** tab → **Window** group → **Freeze Panes** command → **Unfreeze Panes**.

Saving

To save, go to the **File** tab → **Save** (or click on the **Save** icon (floppy disk)  on the **Quick Access toolbar**).

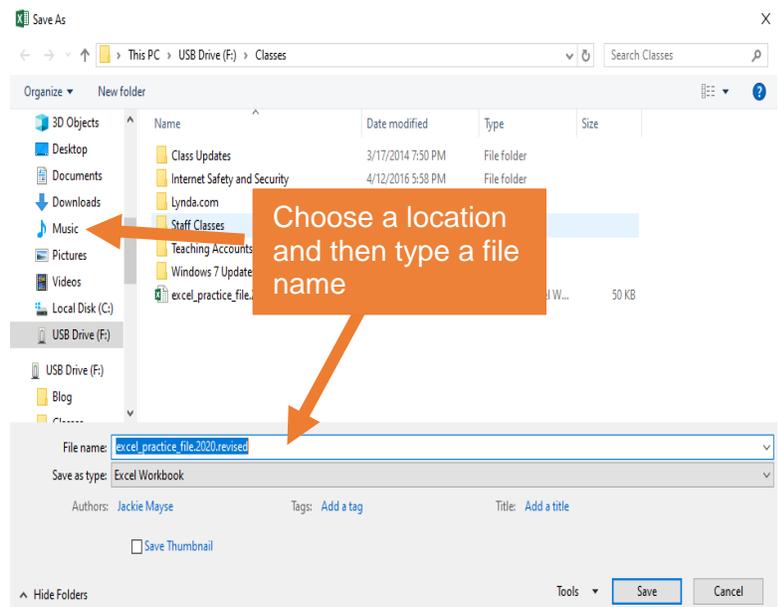
Save As

Use the **Save As** option to:

- save a different version of the document
- save to a different location
- save the document in an older version of Excel

If saving a new document go to the **File** tab → **Save As**

1. In the **excel_practice_file.xls**, go to the **File** tab → **Save As** → **Browse**
2. In the **Save As** dialog box, select a location to save the workbook (Documents folder, Flash Drive etc)
3. Click in the **File name** text box and type in a new file name
4. Click **Save**



Practice Exercise: Covert a Document to a PDF

5. In the **excel_practice_file.xls**, go to the **File** tab → **Save As** → **Browse**
6. In the **Save As** dialog box, select a location to save the workbook (Documents folder, Flash Drive etc)
7. Click in the **File name** text box and type in a new file name
8. Click on the **Save as type** box and select **PDF**
9. Click **Save**

A PDF copy of the Excel document opens in a new window.