THE EXCEL SKILLSHOP is designed for beginning users of Excel 2016 and for those who would like to learn additional tools. This SkillShop is 50 minutes and uses hands-on, collaborative computer stations. The goal of this SkillShop is to support participants in learning at least five new tools within the View, Home, and Data tabs.

**VIEW TAB**

1. If not available by default, consider checking the checkboxes for: gridlines, formula bar, and headings to make your sheet easier to use.

2. **Freeze Panes** allows users to see selected rows and/or columns while scrolling in a sheet. Freezing rows/columns in place is especially helpful with large data sheets.

3. To freeze both the first column and first row, click in cell B2, then select “freeze panes.”

4. To freeze several rows and/or columns, you must freeze the first row & column as part of your selection. Then, click in the first empty cell below your chosen row and chosen column. For example, to freeze the first 3 rows and first 3 columns, you will click in cell D5.

5. To insert a new sheet within your workbook, click on the + sign at the bottom of the screen. Right-click to rename the sheet. To open a new workbook, use command+N/control+N.

**TIP**

* Change the zoom setting to see your data larger or smaller without editing the font size of your cells.

* Remember to type in your column headings when you start a new sheet.

* Rows are your numbered cells across and columns are lettered cells going down. If this helps: “Rows go low” - row numbers show down the sheet.
HOME TAB

1. You can apply font formats – font style, bold, italics, underlining, and font size – to individual cells or the entire sheet. See the tip below for applying formatting to an entire sheet; highlight individual cells for formatting.

2. **Orientation** allows you to change the direction of your text. You can use this to note “draft,” “total,” or other frequently-used text to keep you organized.

3. When you have cells larger than your font and want to align the text, be mindful of the **Top**, **Middle**, and **Bottom Alignment** buttons.

4. If you see your text extending into another cell, remember to apply **Wrap Text**. You can apply to the entire sheet or individual cells.
   
   a. You can also merge cells with the **Merge & Center** button just below Wrap Text.

**TIP**

* To apply any format to the entire sheet, click on the upper left triangle between cells A & 1.

* To make a cell larger, you can use the format buttons in the Home tab, or you can click on the crosshairs when hovering over any row/column line and click and drag.
HOME TAB

1. Format cells specifically for your data type with the General drop-down. For example, you can format columns for “long date” and when you enter in your dates, the cells will be automatically formatted in that style.

2. If you’d like to remove formatting, you can do so to individual cells or the entire sheet quickly with the Clear Button-Clear Formats. Caution: if you select clear all, it will delete content and formatting.

3. The AutoSum tool allows you to apply quick formulas to rows/columns. To use, highlight the data in your cells by clicking and dragging. Just be sure to select one empty cell below(column) or next to (row) your selected data before clicking the AutoSum drop-down. The empty cell will house the computed formula.

4. To alphabetically Sort a column’s data, select column by letter at top. It is often a good practice to alphabetize your data for easier review. You can also Sort & Filter in the Data Tab.
   
a. If given the option, choose “continue with selection” or “expand the selection” options carefully. If you have connected data across several columns (say, a student gradebook), Sort & Filter will only alphabetize your chosen column, but will keep the corresponding data together if you select “expand the selection.”

TIP
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If you’re using sheets for budgetary purposes, consider using either Currency or Accounting formatting. Accounting will place your currency symbol flush left in the cells, whereas currency will place the symbol just next to your numbers. See the difference?
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HOME TAB

1. You can **Copy** cell data in several ways in rows or columns. To copy cell data, hover over the bottom-right corner of your cell until you see the crosshairs appear. Then click and drag across (row) or down (column) the number of cells that you want to copy.

2. You can also **Copy a Series** of numbers, and have Excel compute the series for you. For example, you can copy 2, 4, 6, 8, and Excel will continue the series for as many cells as you select. Select all 4 of these cells, and then follow the steps in step one above.

   a. Or, you can **Copy any Combination** you like. For example, try coping 2, 4, 2, 4 down a column. You’ll note that Excel is defaulting to “fill series” not “copy series” and your numbers below aren’t 2, 4. After dragging down, click the drop-down icon that appears at your last selected cell and choose the “copy cells” option.

3. There are several **Cell Styles** that you can apply to a cell or any combination of cells. There are themes and data styles that can help you stay organized.

   a. You can also create a **New Cell Style**. Choose your cell(s) and format with your preferred fill color and font color/size. Select that cell, and then select “New Cell Style.” Once it’s added to your style gallery, you can right-click to add it to the gallery for use outside of your current session.
HOME TAB

1. **Conditional Formatting** can be applied to rows or columns. There are several choices and all allow you to quickly and easily see your data conditions represented visually. The options are:
   - Highlight Cells, Top/Bottom Rules, Data Bars, Color Scales, and Icon Sets

2. **Highlighting Cells** allows you to quickly see results like greater than, or duplicates. In many professional settings, you will likely need to highlight and/or remove duplicates from an Excel sheet. Select your row/column, click the Conditional Formatting drop-down, hover over Highlight Cells Rules, and click on **Duplicate Values**. A box will appear asking you about the duplicates and what highlighting you’d like to apply. You can make edits within this box, or click OK and you’ll see any data that is duplicated elsewhere in your row/column highlighted.

3. **Top/Bottom Rules** takes the AutoSum feature a step further. You can quickly compare any numerical values to each other and identify Top 10%, Bottom 10 Items, and others. Follow the step above, but choose Top/Bottom Rules, and then your preferred rule for your row/column.

4. If you’d like to see a quick bar graph of your data, you can select **Data Bars**, and choose your color preference. The data bars will compare your numerical values and show you lowest-highest values.

5. **Color Scales** and **Icon Sets** will compare your data and apply a gradient of colors (Color Scales) or the appropriate icon (Icon Sets) to data that has 3 or more options. See these two examples:

**TIP**
* You can add data to your conditionally formatted rows/columns after your initial formatting, and the formatting will continue to be applied.
DATA TAB

1. You can split any column of data using Text to Columns. A common use is to separate first and last names that were initially entered as one column. In this example, you can see that splitting is not limited to text. You can choose commas, spaces, semicolons, etc. to split the data.

2. If you want to remove duplicate data from a column or entire sheet, highlight the column/entire sheet and select Remove Duplicates.

3. Data Validation is a tool that you can use with existing data as well as impact future data input. To use with existing data, select your column/entire sheet and then Data Validation. You will be prompted to place limits on data. In my example, I limited data to whole numbers between 2-10.

   a. After establishing the rule, I then clicked Data Validation again, and chose Circle Invalid Data. This is why 1’s are circled here.

   b. Once Data Validation is applied, Excel will not permit additional data to be entered that doesn’t fit within the parameters. Thus, if I attempted to input 11 into the column of whole numbers between 2-10, I would see an error message that reads “The value you entered is not valid.”

TIP

* Remember that you can select all data on a sheet with this button:
DATA TAB

1. **Data filtering** is very useful for manipulating existing data. In addition to being able to sort (also by color), you can filter: by color; by individually selecting data using checkboxes; or by rules like greater than, between, etc. Columns will only display what you’ve filtered for.
   
a. To filter several columns, click on any cell (not column/row), and select Filter. To only filter 1 column, select that column and click Filter.

2. **IMPORTANT NOTE:** If you want to save/share the filtered data, be sure to copy the entire sheet and paste it into a new sheet in your workbook. The data that you’ve filtered out is still contained with your sheet.

3. Beyond AutoSum, you can use **subtotal** to calculate several data totals within the same column as well as a grand total. To start, it’s a good idea to use column headings, but this isn’t required. You will be asked if you want to continue without headings, which can be good if you want to subtotal just some data within a column. You will also need a free column to the left of your data, which is where your subtotals/grand total will be automatically placed.
   
a. In the example here, I subtotaled at each change in data: 44, 48, 52, plus you’ll see the grand total below.

b. You can also perform other formulas such as: average, count numbers, max., min., etc.

**TIP**

* Anytime you’re using filtering by color, be sure to note a legend somewhere on the sheet or on a new sheet within the workbook.

* If you plan to upload your sheet into Google Drive, please note that you cannot filter by color in Google Sheets.