Microsoft Excel 2016: Charts & Graphs

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The Practice files for this lesson are located in the subject guide under Practice Files:

Types of Charts

Column or Bar Chart
• Compare distinct items or show single items at distinct intervals. Values are indicated by the height or length of columns. Ex: Display how values change over time.

Line or Area Chart
• Line Charts use a series of consecutive points to plot a variable value over time and show you a trend. They imply a pattern of change over time. Ex: Daily rainfall over the course of a month
• Area charts show the relative contributions over time that each data series makes to a whole picture. Ex: How much the relative salesperson contributed to total quarterly earnings

Pie or Doughnut Chart
• Show the relationship between one or more “pieces” of the pie in comparison to the whole pie. Great for demographic data, budget info, sales figures, etc. They provide snapshots for specific periods of time.

Hierarchy Chart (Sunburst & Treemap)
• Shows a hierarchical view of your data and an easy way to compare different levels of categorization. Ex: Items with the greatest number of sales are at the top of the chart and take up the most visual real estate

Statistical (Histogram, Box & Whisker)
• Histogram charts shows the frequencies within a distribution. Ex: the distribution of colors in a photograph
• A box and whisker chart shows distribution of data into quartiles, highlighting the mean and outliers. The boxes may have lines extending vertically called “whiskers”. These lines indicate variability outside the upper and lower quartiles, and any point outside those lines or whiskers is considered an outlier. Use this chart type when there are multiple data sets which relate to each other in some way. Ex: Students’ test scores in multiple subject area

Scatter or Bubble Chart
• Merely plots the data points against their values. While less visually appealing, the lack of bar, columns or pie pieces can be an advantage since scatter diagrams allow viewers to draw their own conclusions.

Waterfall or Stock Chart
• A waterfall or stock chart shows a running total of your financial data as values are added or subtracted. It's useful for understanding how an initial value is affected by a series of positive and negative values.
Combo Chart
- Data that's arranged in columns and rows can be plotted in a combo chart. Combo charts combine two or more chart types to make the data easy to understand, especially when the data is widely varied.

Surface or Radar Chart
- Useful when you want to find optimum combinations between two sets of data. As in a topographic map, colors and patterns indicate areas that are in the same range of values.

Chart Elements

Shortcut Tools
Shortcut Tools appear when you select your chart. From here you can access the Add Elements button, Change Style or Color buttons, and Filtering Options.

Chart Tools
When you select a chart, a contextual tab named Chart Tools appears in the ribbon containing the Design and Format tabs. Use the Design tab commands to Switch Row/Column Data or Change Chart Type.
ACTIVITY #1

What type of chart best fits our Sales Data worksheet?

ACTIVITY #2

1. Open Practice File- MS Excel 2016 Charts & Graphs.
2. Highlight cells A1:E6
3. Click on the Insert tab, and then on the Column button ; select Clustered Column

ACTIVITY #3

1. Select your chart.
2. Click the Chart Elements button , check the Axis Title box.
3. Select the Chart Title text box. Click inside the text box. Delete the old text and type 2016 Quarterly Earnings. Click outside of the text box.
4. Select the Axis Title text box on the x-axis. Hit the DELETE key on your keyboard to delete the text box.
5. Select the Axis Title text box the y-axis. Click inside the text box. Delete the old text and type Earnings. Click outside of the text box.
6. Click the Filter Options button.
7. Uncheck the Yoko box from the Categories section. Click Apply.

Your finished chart should look like the one below:
ACTIVITY #4

1. Select your chart. From the Design tab, click the Change Chart Type button. From the left sidebar, choose Bar. Choose Clustered Bar. Click OK.
2. Select your chart. From the Design tab, click the Switch Row/Column button.
3. Select your chart. From the Design Tab, click the Move Chart button. Check the New Sheet button. Click OK.

Your sheet moves to its own worksheet.

Your chart should look like the one below:

ACTIVITY #5

1. Double-click on the x-axis. (Hint: Click any of the values such as $20,000 or $40,000 at the bottom of the chart).
2. A formatting window opens on the right sidebar.
3. Navigate to the Axis Options section.
4. Type 10,000 in the Major field under units.
5. Press the ENTER KEY.
6. Your units are now set to 10,000.
7. Close the formatting window by click the grey x.