Excel 2013

Lesson 4 Notes--Charts

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| Chart Terms | Using the attached chart, label these parts:   * Chart Area--Entire chart and its elements. * Plot Area--Rectangular area defined by two axes. * X-Axis--Horizontal frame of charts. Sometimes called the Horizontal Axis. Usually shows time as its category. By default, Excel uses the data in the first row as the X-axis. * Y-Axis--Vertical frame of charts. Sometimes called the Vertical Axis. Usually shows quantities as its category. By default, Excel uses the data in the first column as the Y-axis and the legend. * Axis Titles--Headings that help the reader understand the axis categories. * Chart Title--Title which states the purpose of the chart’s contents. * Tick Marks--Small lines like divisions on a ruler that extend to the labels on the X-Axis or Y-Axis. (These do not appear on all charts in 2013 version). * Gridlines--Extend the tick marks horizontally or vertically to help the reader see the values associated with data markers. * Data Marker--Graphic object which represents an individual data point (value). * Data Points – the specific values plotted on a chart. * Data Series--Group of related data points. * Legend--Key that identifies what data markers represent which data series. * Chart Border—Border that surrounds the chart * Selection Handles—Dotted triangles or rectangles around the chart that let you know it is selected. * Data Labels--Values that appear for data markers. NOTE: Don’t use grid lines and data labels together. Your chart will look cluttered. * Explode–In a Pie chart, you can make a piece of the pie disconnected from the rest of the pie. This is called exploding. |
| Types of Charts | These are the types of charts that Excel can do:   1. Area—Emphasizes the magnitude of change. It shows the relationship of parts to the whole. 2. Bar or histogram—Shows individual figures at a specific time, or shows variations between components but not in relationship to the whole. 3. Bubble—Compares sets of three values in a manner similar to a scatter chart, with the third value displayed as the size of the bubble marker. 4. Column (histogram)—Compares separate items as they vary over time. 5. Doughnut—Shows the relationship of parts to the whole. 6. Line—Shows trends and change over time at even intervals. It doesn’t emphasize the magnitude of change. 7. Pie—Shows proportions and relationships of parts to the whole. 8. Radar—Emphasizes differences and amounts of change over time. Each category has its own value axis radiating from the center point. 9. Stock—Shows four values for a stock—open, high, low, and close. 10. Surface—Shows trends in values across two dimensions in a continuous curve. 11. Scatter (XY)—Shows relationships among numeric values in several data series or plots the interception points between X and Y values. It is commonly used for scientific data. |
| Creating a Chart | **To create a chart:**   1. Select the cells in the worksheet that you want to chart. *NOTE: It is extremely important that you select the cells, top to bottom and left to right. Otherwise, your chart will NOT display.* 2. Select the type of chart you want (Insert Tab, Charts Group) OR you can use the shortcut of Alt+F1. 3. From the drop-down gallery that displays, click the desired chart style. |
| Sizing, Moving, and Deleting a Chart | **To size a chart:**   1. Position the mouse pointer on a sizing handle (*white squares)* that display on the chart borders until the pointer turns into a two-headed arrow. 2. Drag the top and bottom middle sizing handles to increase or decrease the height of the chart. 3. Use the left and right middle sizing handles to increase or decrease the width of the chart. 4. Use the corner sizing handles to increase or decrease the height and width at the same time.    1. To maintain a chart’s proportions, hold down the Shift key while dragging one of the chart’s corner borders.   **To change the height/width of the chart using a specific measurement:**   1. Select your chart 2. From your Chart Tools Contextual Tab, click on the Format Tab, Size Group. 3. Click on the spin boxes under the Shape Width or the Shape Height button to increase or decrease the size of your chart.   **To move a chart:**   1. Select the chart 2. Position the mouse pointer on the border until it turns into a four-headed arrow, click, and drag.   **To delete a chart:**   1. Select the chart 2. Press your delete key   **To delete the worksheet and the chart:**   1. This has to be done separately. 2. Delete the chart by following the steps above 3. To delete the worksheet:  * Point at the Worksheet Tab (Sheet 1, Sheet 2, etc.) at the bottom of your Excel worksheet screen. * Right click * Choose Delete * Answer “Delete” to permanently delete the data |
| Editing a Chart | By inserting a chart, the Chart Tools Design tab displays. The options in this tab allow you to   * change the chart type, * specify a different layout or style, and * change the location of the chart to display in a separate worksheet.   **To change a chart type:**   1. To bring up your Chart Tools Design tab, select the chart. 2. Click on *Change Chart Type* (Design Tab, Type Group) 3. The *Change Chart Type* dialog box will display. 4. Choose a type and a style from the dialog box.   **To change the data series:**   1. You can switch the default on the X and Y-axis (rows and columns) by: 2. Selecting your chart. 3. Click on the Switch Row/Column button (Design Tab, Data group)   **To change the chart layout (preformatted chart layouts):**   1. Select the chart. 2. Click on a layout option (Design Tab, Chart Layout Group, Quick Layout drop-down list.) 3. These different layout styles with allow the chart to have a preformatted title, legend in different places, add data labels to your data markers, etc.   **To change the chart style (changes the background color and colors of data markers):**   1. Select the chart 2. Click on a Chart Style (Design Tab, Chart Styles Group)   **To change your fonts on the chart:**   1. Select your chart 2. Click on the Home Tab, Font Group (This is the same as in Word.) |
| Saving the Chart without the Worksheet | **To change the chart location (save as a new sheet without the worksheet):**   1. Select the chart 2. Click on the Move Chart button (Design Tab, Location Group) 3. Choose *New Sheet* option 4. If you decide you want to save the chart as “Object In”, just repeat the steps above. |
| Printing the Chart Only | **You can print the chart without the table by:**   1. Selecting the chart and pressing print 2. Saving the chart with the “New Sheet” option. (See steps above). |
| To Delete Chart Elements | **You can delete chart elements by:**   1. Selecting the specific chart elements you want to delete. 2. Press the Delete key. |
| Formatting with Chart Buttons | When a chart is inserted in a worksheet, three buttons display at the right side of the chart border. Each of these buttons has a side menu where choices can be made. The three formatting chart buttons are:   1. **Chart Elements** 2. This button lets you add, remove or change chart elements such as the title, legend, gridlines and data labels. 3. The check boxes containing check marks indicate the elements that are currently part of the chart. Other chart elements can be added by inserting a check mark next to the desired element. 4. Each chart element has a side menu containing additional options. 5. **Chart Styles** 6. A variety of chart styles can be found by clicking the Chart Styles button. 7. The side menu displays a gallery of styles to choose from. 8. Chart colors can be changed from the Chart Styles menu gallery. To change the chart colors, do the following:    1. Click the Chart Styles button and click the COLOR tab that displays to the right of the STYLE tab.    2. A color palette displays where you can choose a desired color   **3. Chart Filters**   1. Chart Filters are used to isolate specific data in your chart. 2. Clicking the Chart Filters button will display a side menu where you can remove check marks from elements that you do not want to appear in your chart. After removing an element, click the Apply button at the bottom of the side menu. 3. Click the NAMES tab from the side menu and options display for turning on/off the display of column and row names. |
| Formatting Chart Elements using the Format Chart Contextual Tab | **To format a chart element using the Format Chart Contextual tab:**   1. Select the chart. 2. From the Chart Tools tab, select the Format contextual tab. 3. In the Current Selection Group, click the Chart Elements drop down to display a list of all chart parts being used in your chart. 4. Select desired chart element to format. 5. Once the chart element is selected click the Format Selection button found in the Current Selection Group. This will open a task pane at the right of the screen. 6. From the task pane, you have a variety of format options such as fill, effects, borders, text options, etc. |
| Formatting Elements using Right Click | **You can also format chart elements by right clicking the element. Do the following:**   1. Right click on desired chart element to select the element. 2. From the pop-up menu, choose format. 3. From the task pane that opens at the right of the screen, make desired format choices. |