Microsoft Excel 2016 Core Validate Exercise

Instructions:

In this project, you will apply your skills to create a workbook that constitutes an annual report for Acme Widgets. The required resources will be provided to you to complete this document.
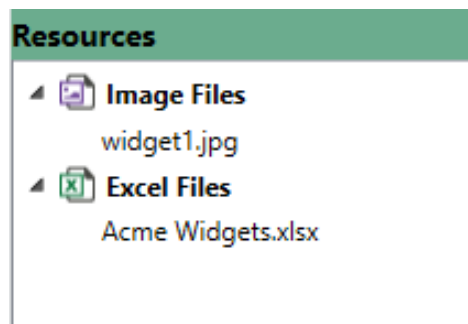
It is very important that you read and adhere to the following instructions. In the ResourceFiles folder you will find the required files to create your final workbook. When you finish the project, the workbook should contain five worksheets; one worksheet will include a table, one will include a chart, another will include an image, and one will display formulas instead of formula results.

Use the list of tasks as a checklist, so you can check off those elements that you've already performed, and avoid missing any.

This Validate Exercise contains **70 tasks**.

The maximum time to complete the project is **50 minutes**.

Note: Accept the defaults in all cases unless otherwise specified in the instructions.

1. Open the **Acme Widgets** workbook from the *Documents\Jasperactive\ResourceFiles* folder.
2. In the **Annual Sales** worksheet, insert two new rows before row 1.
3. Delete column B.
4. Enter the text **ACME Widget Sales** into cell A1.
5. Center and merge the text **ACME Widget Sales** in cells A1 through F1.
6. Enter the value **2017** into cell D3.
7. Use AutoFill so that cells E3 and F3 display the years 2018 and 2019, respectively.
8. Make the **Bonus** worksheet the active worksheet.
9. Insert formulas into the cell range D4 to D17 to reference the 2019 sales values for the same employee in column F of the Annual Sales worksheet.
10. Copy the contents of the cell range D4 to D17 in the Bonus worksheet, and paste them back into the same location as values only.
11. Insert the **Wave** shape and position it across cell G1:H2
12. Make the **Annual Sales** worksheet the active worksheet again.
13. Apply the **Heading 1** cell style to cell A1.
14. Apply the **Bold** attribute and **Center** align the text in cells A3 to F3.
15. Apply the **Number** format to the cell range C4 through F17 and specify to display zero (**0**) decimal places and include a **thousand (1000) separator**.
16. Sort the data in cells A4 through F17 in ascending order first by region, and then by employee name.
17. Create the range name **Year2016** that includes cells C4 through C17.
18. Create the range name **Year2019** that includes cells F4 through F17.
19. Use the Quick Analysis tool to apply Data Bars to the cell range C4 through F17. Fill SolidBlue
20. Insert a Line Sparkline for each cell in the range G4:G17 to show the four-year trend in sales.
21. Format the sparklines to show markers for the high point and the low point.
22. Enter a formula into cell I4 that shows the percentage increase between the 2016 sales figure and the 2019 sales figure. Use the range names you defined earlier in the formula. Hint: To find the percentage increase, find the difference between the two values, then divide the difference by the original value.
23. Copy the formula in cell I4 to cells I5 through I17.
24. Apply the Percent format to cells I4 through I17 and specify to show zero (0) decimal places.
25. Enter SUM formulas in cells C19 through F19 that show the sum of sales for each year.
26. Enter AVERAGE formulas in cells C20 through F20 that calculate the average of all sales for each year.
27. Enter MAX formulas in cells C21 through F21 that show the largest sale for each year.
28. Use the find tool to locate the cell that contains the text **Armstrong**.
29. Copy the range A3 to F17 to the Clipboard of the Annual Sales worksheet. Paste the data into a new worksheet starting at cell A1.
30. Rename the new worksheet to **Sales Table**.
31. Change the tab color of the Sales Table worksheet to **Yellow**.
32. Move the Sales Table worksheet so that it is the first worksheet in the workbook.
33. Clear the Data Bars formatting from cells C2 through F15.
34. On the **Sales Table** worksheet, convert the cell range A1 to F15 to a table with headers activated that uses the **Table Style Light 2** style.

35 Insert a Total Row into the table. Use Excel's built-in tool to activate the row; do not use the SUM function.Where necessary in the cell range C16 to F16, display the sum total for each year in this range.

36 Filter the table to show data only for employees in the Seattle and Texas regions.

37 Change the sort order so that the table lists records in descending order by 2019 sales.

38 Apply the **Table Style Medium 1** style to the table and ensure that filter buttons are enabled.

39 Magnify this worksheet up to 150%.

40 Copy the **Sales Table** worksheet and move the copy to the end so that it is the last worksheet in the workbook.

41 With the **Sales Table (2)** worksheet active, convert the table to a range.

42 Make the **Bonus** worksheet the active worksheet.

43 For each employee listed in the sheet, enter a CONCATENATE formula in column C that will display the employee's first name, followed by a space, followed by the employee's last name. Use the CONCATENATE function; do not use the "&" operator.

44 Apply conditional formatting for cell D4:D17 so that any cell with a value greater than 100,000 is highlighted with **Light Red Fill with Dark Red Text**.

45 ACME Widgets pays a $1,500 bonus to all sales persons who generate more than $100,000 in sales each year. Enter conditional formulas in cells F4 through F17 that will display the value 1,500 if the sales person qualifies for the bonus, or will display the value 0 if the sales person does not qualify for the bonus.

46 Apply the **Accounting Number Format** to cells F4 through F17, and specify to show zero decimal places.

47 Hide columns A and B.

48 Enter a formula in cell F19 that will count the number of bonuses to be paid for 2019. Be sure to use the COUNTIF function.

49 Make the **Pay Rates** worksheet the active worksheet.

50 Enter formulas in column C that will determine what the salary will be for each employee with a 3 percent pay increase in 2020 over the 2019 amount. Every formula in this column must reference cell F2.

51 Enter formulas in column D that will determine what the salary will be for each employee with a 5 percent pay increase in 2021 over the 2020 amount. The formulas must reference cell F3.

52 Specify for the Pay Rates sheet only to display formulas in cells instead of their calculated result.

53 Adjust the widths of columns A through F so that they are just wide enough to display the data they contain.

54 Change the orientation of the Pay Rates sheet to **Landscape**.

55 Insert the **widget1.png** image from the *Documents\Jasperactive\ResourceFiles* folder into cell A22.

56 Resize the image so that it is 2.5 inches wide and assign the text **Pay Rates** as the title of the image.

57 Add the hyperlink **http://www.acme.com** to the image and move it to cell G6.

58 Set the range A1:H22 as a print area.

59 Add a header to the Pay Rates sheet and insert the text **Pay Raise Formulas** in the Left section. Hint: Be sure to switch back to Normal view after adding your header.

60 Access the Print options and specify to center the data horizontally on the page.

61 Make the Regions worksheet the active worksheet.

62 Using the cell range A4:D7 as the data source, insert a **Clustered Column Chart** into the worksheet.

63 Add the range E4:E7 as a data series for the chart.

64 Move the chart so that the upper-left corner is in cell **A10**.

65 Change the chart title to **Four Years Sales**.

66 Resize the chart so that it fits in the range A10:E21.

67 Change the chart type to a clustered bar chart.

68 Apply the **Ion Boardroom** theme to the workbook.

69 Modify the print options so that all columns will fit on one page when printing. Add the title **Acme Widgets** to the document properties

70 Save the workbook as **Acme Widgets AnnualReport** in the *Documents\Jasperactive\MyProjects* folder. Save a copy of the workbook as a PDF with the same title in the *Documents\Jasperactive\MyProjects* folder.

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– THE END –
Good luck at your MOS certification exam!

From YH high school ICT Teachers

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