SAM Projects

Put your skills into practice with SAM Projects! SAM Projects for this tutorial can be found online. If you have a SAM account, go to www.cengage.com/sam2013 to download the most recent Project Instructions and Start Files.

Review Assignments

Data Files needed for the Review Assignments: Menu.xlsx, Background2.png

Sanjit has a worksheet that details the sales of individual items from the Big Red Wraps menu. He asks you to format the sales figures and design a layout for the printed sheet as you did for the Sales Report workbook. Complete the following:

1. Open the **Menu** workbook located in the Excel2 ▶ Review folder included with your Data Files, and then save the workbook as **Menu Sales** in the location specified by your instructor.
2. In the Documentation sheet, enter your name in cell B4 and the date in cell B5.
3. Make the following formatting changes to the Documentation sheet:
    a. Set the background image to the **Background2.png** file located in the Excel2 ▶ Review folder.
    b. Format the text in cell A1 in red 26-point bold Calibri Light.
    c. Format the text in cell A2 to red 10-point italic Calibri Light. Change the text string "Big Flavor" to 14 points.
    d. Apply the Accent2 cell style to the range A4:A6.
    e. Change the font color of range B4:B6 to red and change its fill color to white.
    f. Format the date in the Long Date format and left-align the cell contents.
4. Use the Format Painter to copy the formatting in the range A1:A2 in the Documentation sheet and paste it to the same range in the Menu Sales worksheet. (*Hint*: You must increase the size of the text "Big Flavor" manually.)
5. Apply the Title cell style to the titles in cells B4, B12, and A20.
6. Make the following changes to the Units Sold table in the range B5:F10:
    a. In cell C6, calculate the total number of wraps sold by the company (found in the range C22:N31). In cell C7, calculate the total number of soups. In cell C8, calculate the total number of sides. In cell C9, calculate the total number of salads.
    b. In cell C10, calculate the sum of the range C6:C9. Copy the formula to cell D10.
    c. In the range E6:E10, calculate the difference between the 2015 and 2014 values. In the range F6:F10, calculate the percent change from 2014 to 2015.
    d. Apply the Accent2 cell style to the headings in the range B5:F5. Center the headings in the range C5:F5.
    e. Apply the Comma style to the values in the range C6:E10. Do not display any numbers to the right of the decimal point.
    f. Apply the Percent style to the values in the range F6:F10 and show two decimal places.
    g. Add a top border to the values in the range B10:F10.
7. Make the following changes to the range B13:F18:
    a. In cells C18 and D18, calculate the totals of the 2014 and 2015 sales. In the range E14:F18, calculate the change in sales and the percent change.
    b. Copy the format from the range B5:F10 and paste it into the range B13:F18.
    c. Change the format for the values in the ranges C14:E14 and C18:E18 to Accounting format with no decimal places.

8. Make the following changes to the Units Sold per Month table in the range A21:O46:

    a. In the range O22:O45, calculate the total units sold for each menu item. In the range C46:O46, calculate the total items sold per month and overall.

    b. Format the headings in the range A21:O21 with the Accent2 cell style. Center the headings in the range C21:O21.

    c. Format the units sold values in the range C22:O46 with the Comma style and no decimal places.

    d. Change the fill color of the subtotals in the range O22:O45 and C46:N46 to White, Background 1, Darker 15% (the first color in the third row of the theme colors).

    e. Merge each of the menu categories in the range A22:A45 into single cells. Rotate the text of the cells up. Increase the font size to 18 points and middle-align the cell contents.

    f. Format cell A22 with the "Wraps" label in a white font on a Gray-25%, Background 2, Darker 50% fill. Format cell A32 with the "Soups" label in a white font on Blue, Accent 1, Darker 25% fill. Format of cell A37 with the "Sides" label in a white font on a Gold, Accent 4, Darker 25% fill. Format cell A42 with the "Salads" label in a white font on a Green, Accent 6, Darker 25% fill.

    g. Add a thick box border around each category of menu item in the ranges A22:O31, A32:O36, A37:O41, and A42:O45.

9. Create a conditional format for the subtotals in the range O22:O45 highlighting the top five selling items with a yellow fill and dark yellow text.

10. Create a legend for the conditional format. Enter the text **Top 5 Sellers** in cell O48. Add a thick box border around the cell, and then use a conditional format that displays this text in dark yellow text on a yellow fill.

11. Set the following print formats for the Menu Sales worksheet:

    a. Set the print area to the nonadjacent range A1:F19;A20:O48.

    b. Remove any automatic page breaks in the large Units Sold table. Insert a manual page break to separate the June and July sales figures. The printout of the Menu Sales worksheet should fit on three pages.

    c. Scale the printout to 70 percent of normal size.

    d. Define the print titles to repeat the first three rows at the top of the sheet, and the first two columns at the left of the sheet.

    e. Increase the left margin of the printout from 0.7 inch to 1 inch.

    f. Create headers and footers for the printout with a different header for the first page.

    g. For the first page header, print **Prepared by** *your name* in the right section. For every other page, print **Filename:** *file* in the left section and *date* in the right section, where *file* is the name of the workbook file and *date* is the current date. (*Hint*: Use the buttons in the Header dialog box to insert the filename and date.)

    h. For every footer, print **Page** *page* **of** *pages* in the center section, where *page* is the page number and *pages* is the total number of pages in the printout.

12. If you are instructed to print, print the entire workbook in portrait orientation. Verify that the company name and slogan appear on every page of the Menu Sales worksheet printout, and that the menu category and menu item name appear on both pages with the Units Sold table.

13. Save and close the workbook.

Case Problem 1

APPLY

Data File needed for this Case Problem: Salon.xlsx

Special Highlights Hair Salon   Sarah Jones is developing a business plan for a new hair salon, Special Highlights Hair Salon, located in Hatton, North Dakota. As part of the business plan, she needs a projected income statement for the company. You will help her develop and format the income statement. Complete the following:

1. Open the **Salon** workbook located in the Excel2 ▶ Case1 folder included with your Data Files, and then save the workbook as **Salon Income Statement** in the location specified by your instructor.

2. In the Documentation sheet, enter your name in cell B3 and the date in cell B4.

3. Apply the following formatting to the Documentation sheet:
   a. Format cell A1 using the Title cell style.
   b. Format the range A3:A5 using the Accent6 cell style.
   c. In cell B4, format the date value using the long date format, and left-align the cell contents.
   d. In cell B5, format the text string "Special Highlights Hair Salon" in italic.

4. In the Income Statement worksheet, format cell A1 using the Title cell style.

5. Calculate the following items in the Income Statement worksheet:
   a. In cell C7, calculate the Gross Profit, which is equal to the Gross Sales minus the Cost of Sales.
   b. In cell C21, calculate the Total Operating Expenses, which is equal to the sum of the operating expenses.
   c. In cell C22, calculate the Total Operating Profit/Loss, which is equal to the Gross Profit minus the Total Operating Expenses.
   d. In cell C23, calculate the projected Income Taxes, which is equal to 35 percent of the Total Operating Profit/Loss.
   e. In cell C24, calculate the Net Profit/Loss, which is equal to the Total Operating Profit/Loss minus the projected Income Taxes.

6. Set the following formats to the Income Statement worksheet:
   a. Format cells A3 and A26 using the Heading 2 cell style.
   b. Format cells A4 and A9 and the range A27:A38 in bold.
   c. Format cells B5, C7, B10, C21, and C24 using the Accounting format with no decimal places.
   d. Format cells B6, B11:B19, C22, and C23 using the Comma style with no decimal places.
   e. Indent the text in the ranges A5:A6 and A10:A19 two spaces. Indent the text in cell A7 and the range A21:A24 four spaces.
   f. Add a bottom border to cells B6, C7, C21, C22, and C23. Add a double bottom border to cell C24.

7. Merge cells A26:E26 and then left-align the merged cell's contents.

8. Merge the contents of the range B27:E27. Left-align the merged cell's contents and wrap the text within the cell. Increase the height of row 27 to display the entire contents of the cell.

9. Top-align and left-align the range A27:B38.

10. Copy the format from the range A27:B27 to the range A28:B38. Merge columns B through E in each row, left-align the text, and resize the row heights to display the complete contents of the cells.

11. Italicize the text string "National Salon News" in cells B27 and B28.

12. Set the following printing formats to the Income Statement worksheet:

    a. Insert a manual page break directly above row 26 so that the Income Statement prints on two pages.

    b. Set rows 1 and 2 as a print title to print on both pages.

    c. Change the page margins to 1 inch on every side.

    d. On the first page of the printout, print **Prepared by** *your name* in the left section of the header, where *your name* is your name. Print the **current date** in the right section of the header. Do not display header text on any other page.

    e. For every page, add a footer that prints the workbook *filename* in the left section, **Page** *page* in the center section, and the *worksheet name* in the right section.

13. If you are instructed to print, print the entire contents of the workbook in portrait orientation.

14. Save and close the workbook.

Case Problem 2

Data File needed for this Case Problem: Waist.xlsx

Waist Trainers   Alexandra Roulez is a dietician at Waist Trainers, a company in Fort Smith, Arkansas, that specializes in personal improvement, particularly in areas of health and fitness. Alexandra wants to create a meal-planning workbook for her clients who want to lose weight and improve their health. One goal of meal planning is to decrease the percentage of fat in the diet. Alexandra thinks it would be helpful to highlight foods that have a high percentage of fat as well as list their total fat calories. She already created a workbook that contains a few sample food items and lists the number of calories and grams of fat in each item. She wants you to format this workbook. Complete the following:

1. Open the **Waist** workbook located in the Excel2 ► Case2 folder included with your Data Files, and then save the workbook as **Waist Trainers Nutrition Table** in the location specified by your instructor.

2. In the Documentation sheet, enter your name in cell B3 and the date in cell B4.

3. Set the following formatting to the Documentation sheet:

    a. In cell A1, apply the Title cell style, increase the font size to 24 points, and then change the font color to a medium orange.

    b. Apply the Accent2 cell style to the range A3:A5.

    c. Wrap the text within the range B3:B5, and then left- and top-align the text in the cells.

    d. Change the format of the date in cell B4 to the long date format.

    e. Add borders around all of the cells in the range A3:B5.

4. Copy the cell format for cell A1 in the Documentation sheet to cell A1 in the Meal Planner worksheet.

5. In cell F4, enter the text **Calories from Fat**. In cell G4, enter the text **Fat Percentage**.

6. In the range F5:F54, calculate the calories from fat for each food item, which is equal to the Grams of Fat multiplied by 9. In the range G5:G54, calculate the fat percentage of each food item, which is equal to the Calories from Fat divided by the Calories.

7. Format cell A3 using the Heading 4 cell style.

8. Format the range A4:G4 using the Accent2 cell style.

9. Format the range D5:F54 with the Comma style and display one decimal place.

10. Format the range G5:G54 with the Percent style and display two decimal places.

11. Merge the cells in the range A5:A8, rotate the text up, and then center-align the cell content both horizontally and vertically. Change the fill color to medium gold, increase the font size to 14 points, and then change the font color to white.

12. Place a thick box border around the beef food items in the range A5:G8.

13. Repeat Steps 11 and 12 for the other six food categories.

14. For good health, the FDA recommends that the fat percentage in a person's diet should not exceed 30 percent of the total calories per day. Create a Conditional Formatting rule for the fat percentages to highlight those food items that exceed the FDA recommendation in dark red text on a light red fill.

15. In cell G2, enter the text **High Fat Food**. Center the text in the cell. Change the format of the cell to dark red text on a light red fill. Add a thick black border around the cell.

16. Set the following print formats for the Meal Planner worksheet:

    a. Change the page orientation to landscape.

    b. Scale the printout so that the width of the worksheet fits on a single page.

    c. If necessary, create manual page breaks directly above row 25 and above row 44. The worksheet should print on three separate pages.

    d. Repeat the first four rows of the worksheet on every printed page.

    e. For every page, add a footer that prints **Prepared by** *your name* in the left section, **Page** *page* in the center section, and the *worksheet name* in the right section.

17. If you are instructed to print, print the entire contents of the workbook.

18. Save and close the workbook.

Case Problem 3

CHALLENGE

Data File needed for this Case Problem: Wind.xlsx

Winds of Change   Odette Ferris is a researcher at Winds of Change, a privately run wind farm providing supplemental power for communities near Topeka, Kansas. One of Odette's jobs is to record wind speeds from different sectors of the wind farm. She has entered the wind speed data into a workbook as a table with wind speed measures laid out in a grid. Because the numbers are difficult to read and interpret, she wants you to color code the wind speed values using conditional formatting. Complete the following:

1. Open the **Wind** workbook located in the Excel2 ▶ Case3 folder included with your Data Files, and then save the workbook as **Wind Speed Grid** in the location specified by your instructor.

2. In the Documentation sheet, enter your name in cell B3 and the date in cell B4.

3. In the Wind Speed Grid worksheet, merge the range A1:V1, and then apply the Heading 1 cell style to the merged cell and set the font size to 20 points.

4. Format the range B3:V3 as white text on a black background. Copy this formatting to the grid coordinates in the range A4:A64.

⊕ **Explore** 5. Create a conditional format that highlights cells in the range B4:V64 whose value equals 18 with fill color equal to (99, 37, 35). (*Hint:* In the Equal To dialog box, select Custom Format in the with box to open the Format Cells dialog box. On the Fill tab, in the Background Color section, click the More Colors button, and then click the Custom tab to enter the RGB color value.)

⊕ **Explore** 6. Repeat Step 5 to continue creating conditional formats that set highlight colors for the wind speed values in the range B4:V64 using the wind speeds and color values shown in Figure 2-47.