Activity 1: Import an Excel spreadsheet to Google Sheets

In this activity, you practice opening an Excel spreadsheet and saving it as a Google Sheet.

Complete the following steps:

1. Click this link On the Rise forecast report.xlsx to open the Excel spreadsheet from the course drive.
2. Select **Open with Google Sheets**.
3. Select **File** and choose **Save as Google Sheets**.
4. Rename the Google Sheet "On the Rise forecast report_YOURNAME."
5. Star the spreadsheet to add it to the Starred label.
6. Close the Google Sheet, the Excel Sheet, and the preview tabs
7. Go to your My Drive at drive.google.com. Confirm that the spreadsheet is listed in your Starred label.

Activity 2: Manage data in Google Sheets

In this activity, you explore how to add, copy, and paste data. You also practice sorting and filtering data. Use your spreadsheet from the previous activity.

Complete the following steps:

1. Open your Google Sheets spreadsheet from the previous activity "On the Rise forecast report_YOURNAME."
2. Update rows A101-G101 by adding a city, state/province, country, region, and January, February, and March monthly values. Use your own data.
3. Open [Fort Lauderdale On the Rise forecast data](#) in a separate tab.
4. Copy cells A8-D8 from "Fort Lauderdale On the Rise forecast data" and paste them into row 102 in "On the Rise forecast report_YOURNAME." Select **Paste special** and choose **Values only**.
5. Copy cells F8-AO8 from "Fort Lauderdale On the Rise forecast data" and paste them into row 102. Start at cell E102 in "On the Rise forecast report_YOURNAME." Select **Paste special** and choose **Values only.**
6. Close the "Fort Lauderdale On the Rise forecast data" tab.
7. Sort the data in "On the Rise forecast report_YOURNAME."
    a. To sort by country, select **Column C** and select the **down arrow**. Choose **Sort sheet A → Z.**
    b. To sort by region, select **Column D** and select the **down arrow.** Choose **Sort sheet A → Z.**
8. Filter data by region.
    a. Select **Column D** and select **Create a filter** from the toolbar.
    b. Select **Filter** in the top right corner of the cells to open the filter options menu.
    c. Filter by values to view the data from only certain regions. Explore what happens when you filter to see the data from North America – Canada or North America – Mexico. Then, try filtering to see the data from regions outside of the USA.
9. Select **Remove filter** to remove the filter.

Do not close your Google Sheet. You use it in the next activity.

Activity 3: Apply formatting to a Google Sheet

Now it's your turn. In this activity, you apply formatting to your Google Sheet. You practice aligning the text and try two ways to make columns more readable: wrapping text and resizing the column.

Complete the following steps:

1. In your spreadsheet "On the Rise forecast report_YOURNAME", select **Row 1** and change the fill color to orange.
2. Select **Rows 1-2**, and click the **Bold** toolbar icon.
3. Merge duplicate cells.
   a. Select duplicate instances of Cinnamon bun in row 1 (E1-P1).
   b. From the **Format** menu, select **Merge cells**, and choose **Merge all**.
   c. Merge duplicate instances of the other bakery products in row 1.
4. Select **Undo** to undo the last merge. Select **Redo** to return to the merged state.
5. Select **Row 1.** From the **Format** menu, select **Align**, and choose **Center.**
6. Wrap text and resize rows to view contents easier.
   a. Select **Column A**. From the **Format** menu, select **Text wrapping**, and choose **Wrap**.
   b. Select **Rows 3-102**. Double-click the bottom of the row to size to fit OR right-click and select **Resize rows 3-102** and choose **Fit to data**.
7. Resize columns C and D to fit the text. Double-click the right side of each column OR select the columns, right-click, then and select **Resize columns C-D** and choose **Fit to data**.
   a. Column C – Country
   b. Column D – Region
8. Add a border to all cells in rows 101 and 102. Select cells **A101:AN102**, then select **Borders**, then **All borders**.

Do not close your Google Sheet. You use it in the next activity.

Activity 4: Use formulas to perform calculations using Google Sheets

For this activity, you continue working with your spreadsheet from the previous activities. You calculate information about the cinnamon bun sales of On the Rise this year using basic formulas.

Complete the following steps:

1. In your spreadsheet "On the Rise forecast report_YOURNAME", in cell A103, enter **Quarterly total**.
2. In cell A104, enter **Quarterly average**.
3. In cell G103, use a SUM formula to calculate the total cinnamon bun sales forecast for quarter 1 (January, February, and March). Type **=SUM** and select the range (**E3:G102)**.
4. In cell G104, use an AVERAGE formula to calculate the average cinnamon bun sales for quarter 1 (January, February, and March). Type **=AVERAGE** and select the range (**E3:G102**).
5. Repeat steps 3 and 4 for the remaining three cinnamon bun quarters. Ensure you choose the correct range of cells for each quarter.

Do not close your Google Sheet. You use it in the next activity.

Activity 5: Use named ranges to perform calculations

Next, you continue working with your spreadsheet from the previous activity to calculate information for rye bread this year. This time, you use named ranges for your formulas.

Complete the following steps:

1. In your spreadsheet "On the Rise forecast report_YOURNAME", select cells **Q3:S102,** right-click, and select **Define the named range**.
2. Name the range "RyeBreadQuarter1" and select **Done.**
3. Name the following ranges:
   a. T3-V102 "RyeBreadQuarter2"
   b. W3-Y102 "RyeBreadQuarter3"
   c. Z3-AB102 "RyeBreadQuarter4"
4. In cell S103, use a SUM formula to calculate the total rye bread sales forecast for quarter 1. **Type =SUM(** and select the named range **RyeBreadQuarter1**. Close the parenthesis.
5. In cell S104, use an AVERAGE formula to calculate the average rye bread sales forecast for quarter 1. Type **=AVERAGE(** and select the named range **RyeBreadQuarter1**. Close the parenthesis.
6. Repeat steps 4 and 5 for all rye bread quarters.

Now let's add some formatting.

7. Select **Rows 103-104**, then click the **Bold** toolbar icon.
8. Select cells **E3:AN104**, then click **Format**, then **Number**, then choose **Currency**.
9. Select Columns **E-AN**, right-click, then choose **Resize columns E-AN**, then select **Fit to data**, then click **OK**.

Do not close your Google Sheet. You use it in the next activity.

Activity 6: Create a chart

Now, you create a chart that aggregates sales figures for the first three months in the year for each region in North America. Then, you download the chart as a PDF.

Complete the following steps:

1. In your spreadsheet "On the Rise forecast report_YOURNAME", select column **C**. Sort the sheet on that column in reverse alphabetical order so that the USA appears at the top of the sheet.
2. Then select cells **D2:G51,** then click the **Insert chart** toolbar icon.

Google Sheets suggests a chart type. The chart includes sales for each store in North America (USA) for the first quarter of the year. You now combine sales figures by region.

3. Resize the chart. Drag the left and right sides of the chart to make it wider.
4. In the Chart editor panel, change the chart type to **Bar chart**, and check the **Aggregate** box.
5. Select the **Customise** tab, and expand **Chart and axis titles**. Enter a title of "North America Q1 Sales by Region"
6. Expand the **Series** section, and select **Data labels**. to add the total sales figures to the chart.
7. Download the chart as a PDF. Click the chart, then click the three dots in the top right corner, and choose **Download, PDF Document (pdf)**.
8. Optionally, explore some other settings in the Chart editor panel.
9. Delete the chart. Click the chart, then click the three dots in the top right corner, and choose **Delete chart**.

Do not close your Google Sheet. You use it in the next activity.

Activity 7: Explore sharing options

In this activity, you explore some ways you can track versions and share your spreadsheets using Google Sheets. You also practice downloading a spreadsheet to Excel. Continue working with your spreadsheet "On the Rise forecast report_YOURNAME."

 Complete the following steps:

1. Check the version history of the spreadsheet.
    a. From the **File** menu, select **Version history** and choose **See version history**. When have changes been made to the spreadsheet? Who has made changes?
    b. Select the date and time of the current version. Select **More actions**, then **Name this version** and create a named version "Ready to share."
    c. Close the version history page to return the spreadsheet.
2. Select **Share** and change the link sharing settings.
    a. Change the link scope to allow anyone in your organization.
    b. Change the access level to **Commenter.**
3. From the **File** menu, select **Download** and choose **Microsoft Excel**.

Do not close your Google Sheet. You use it in the next activity.

Activity 8: Comment, edit, and assign an action item

In this activity, you use your spreadsheet "On the Rise forecast report_YOURNAME" to practice working with comments.

Complete the following steps:

1. Select a cell and select the **Insert** menu, then choose **Comment**.
2. Type a comment and select **Comment** to post your comment.
3. Select **More options** then **Edit**. Edit your comment, and select **Save**.
4. Create a new comment, and @mention a colleague. Remember to tell your colleague to ignore the comment as this is only a training exercise..
5. Check the "Assign to…" box, and choose **Assign**.

In the previous activity, you set your spreadsheet permissions to allow anyone in your organization to comment on your spreadsheet. If you had not done that, you would have been prompted to add your colleague as a collaborator on your spreadsheet when you assigned them an action item.

6. Close the "On the Rise forecast report_YOURNAME" tab.

Business challenge: Details in the data

In this activity, you apply what you've learned about Google Sheets to help Sherrie West and the team at On the Rise Bakery solve a business challenge.

Task 1

Sherrie informs you that she has recently collected numbers from On the Rise stores across the globe and added them to a spreadsheet.

Sherrie asks for your help. She wants to analyze the data to better understand the current and future employment situation at On the Rise. She also hopes to share her findings and collaborate with the On the Rise leadership team. To achieve these goals, Sherrie needs your help to leverage the power of Google Sheets.

Complete the following steps:

1.   Open the spreadsheet On the Rise employee openings – North America – East region. Make a copy to My Drive when prompted.
2.   Rename your copy with your first and last name to read: "On the Rise employee openings_YOURNAME."
3.   Star the Google Sheet.

Task 2

You inform Sherrie that you've renamed and starred the spreadsheet to make it easy to locate in Google Drive.

Sherrie thanks and tells you she recently received an update from On the Rise Fort Lauderdale store owner Yousef Amadi. Yousef just uploaded a new Google Sheet with employment data from his location. He has named the Sheet "On the Rise employee openings – Ft. Lauderdale."

Sherrie requests that you add Yousef's data to her main spreadsheet.

Later, Sherrie informs you that unfortunately On the Rise store Charleston has closed permanently. She asks you to remove that store's data from the spreadsheet.

Complete the following steps:

1.   Open your Google Sheet "On the Rise employee openings_YOURNAME."
2.   Then, open On the Rise employee openings - Ft Lauderdale and copy the values found in **Row 4.**
3.   Paste the data from **Row 4** in the Ft Lauderdale Sheet into a new row, **Row 21** in "On the Rise employment openings_YOURNAME." Select **Paste special** and choose **Values only** to paste only the numeric values and none of the formatting from the spreadsheet of Yousef.
4.   Select the row containing the Charleston data and delete it.
5.   Close the "On the Rise employee openings - Ft Lauderdale" tab.

Task 3

In order to help Sherrie make "On the Rise employee openings_YOURNAME" easier to navigate, you offer to make some formatting changes. You freeze the header, merge ranges to eliminate duplication. You also wrap text, align data, add colors to differentiate each quarter, and color the borders.

Complete the following steps:

1.   Freeze the header of the spreadsheet.
     a.   Select **Row 3**.
     b.   From the **View** menu, select **Freeze** and choose **Up to current row**.
2.   Merge the ranges that follow. Select the cells and from the **Format** menu select **Merge cells** and choose **Merge all**.
     a.   Employee Openings C1:N1
     b.   Actual C2:H2
     c.   Forecast I2:N2
3.   Select **Column A.** From the **Format** menu, select **Text wrapping**, and choose **Wrap**.
4.   Resize columns **K**, **M**, and **N**. Select the column, right-click, select **Resize column,** and choose **Fit to data**.
5.   Select **B1:N20**. From the **Format** menu, select **Align**, and choose **Center** and **Middle**.
6.   Make each quarter a different color. Select the range, Fill color, and choose the following colors:

     a.   Q1 (**C4:E20**) choose **light yellow 3.**
     b.   Q2 (**F4:H20**) choose **light yellow 2.**
     c.   Q3 (**I4:K20**) choose **light blue 3.**
     d.   Q4 (**L4:N20**) choose **light blue 2.**

7. Make the cell borders dark gray.
     a.   Select cells **A1:N20.**
     b.   Select **Borders.**
     c.   Choose **All borders.**
     d.   Choose **Dark gray 3.**

Task 4

Sherrie is still having a difficult time with the data, so you offer to make some more updates to make the Sheet easier to navigate.

Start by sorting data by city A > Z. Next, filter the entries by state. Then, name each range after the corresponding month.

Complete the following steps:

1. Sort the data by city.
     a.   Select **Column A.**
     b.   Select the **down arrow** and choose **Sort sheet A → Z.**
2. Set up a filter by state.
     a.   Select **Column B**.
     b.   From the top menu, select **Create a filter**.
     c.   Try filtering by state. How many stores are in New York? Pennsylvania?
     d.   Reset the filter to show all states.
3. Name a range for each month. Select the range, right-click, and select **Define the named range.**
     a.   C4:C20 "Jan"
     b.   D4:D20 "Feb"
     c.   E4:E20 "Mar"
     d.   F4:F20 "Apr"
     e.   G4:G20 "May"
     f.   H4:H20 "Jun"
     g.   I4:I20 "Jul"
     h.   J4:J20 "Aug"
     i.   K4:K20 "Sep"
     j.   L4:L20 "Oct"

   k. M4:M20 "Nov"
   l. N4:N20 "Dec"

Task 5

Next, to help Sherrie better understand what is happening each month and over the year as a whole, you apply two formulas: SUM and AVERAGE. You tell Sherrie that naming the ranges helps simplify the formulas.

You use a SUM formula to calculate the total job openings for each month. You then combine all the monthly totals to calculate the total job vacancies for the year.

To determine which stores are experiencing the most turnover, you calculate the yearly average of job openings per store. You apply the AVERAGE formula to each On the Rise location.

Complete the following steps:

1. In cell A21, enter "Total."
2. Calculate the total job openings per month using a SUM formula and your named ranges.
  a. For January, apply the formula **C21=sum(Jan)**
  b. For February, apply the formula **D21=sum(Feb)**
  c. For March, apply the formula **E21=sum(Mar)**
  d. Complete similarly for the remaining months.
3. In cell O3, enter "Average."
4. Calculate the yearly average of job openings per store by applying the AVERAGE formula to column O.
  a. For Albany, apply the formula **O4 =average(C4:N4)**
  b. Double-click the bottom right corner of cell O4 or drag the bottom-right corner of cell O4 to O20 to reveal averages for all cities.
  c. Select column O, and from the toolbar, choose **Decrease decimal places** to round values in this column to one decimal place.
5. Bold **Row 21**, and **Column O.**
6. Select **C21:O21**. From the **Format** menu, select **Align**, and choose **Center** and **Middle**.
7. Repeat step 6 for **Column 0**.

Task 6

Sherrie tells you she shares the spreadsheet with the On the Rise leadership team soon. She

is concerned about accidental data changes and wants to make sure current store data is protected. She'd like Thomas to be able to make updates if necessary, so you assign him as an editor for the protected range.

Complete the following steps:

1. From the **Data** menu, choose **Protect sheets and ranges**.
2. Enter a description, and select **Range** and choose **C4:N20**.
3. Select **Set permissions.** Choose **Restrict who can edit this range** and **Custom**.
4. Add Thomas Omar as an editor. In this case though, add your instructor's email address.
5. Click **Done**.
6. Click **Share** to grant your instructor editor access to the spreadsheet.

Task 7

1. Share the spreadsheet with the leadership team (choose another colleague, and let them know as before that you are undertaking a training exercise) as a Commenter. To share silently, you can uncheck the **Notify people** box when sharing.

Next, you will play the part of someone on the leadership team.

2.   Leave at least two general comments.
3. Assign an action item to yourself or one of your collaborators.

A few days later, Sherrie informs you that she is ready to share the spreadsheet with the On the Rise leadership team for review. She provides you the team emails and you invite each member, assigning them commenter permission only.

Leadership team members access the spreadsheet and leave numerous comments. They also assign action items for Sherrie West and Thomas Omar.

Complete the following steps:

1. Share the spreadsheet with the leadership team (choose another colleague, and let them know as before that you are undertaking a training exercise) with commenter permission. To share silently, you can uncheck the **Notify people** box when sharing.

Next, you play the role of someone on the leadership team.

2.   Leave at least two general comments.
3.   Assign an action item to yourself or one of your collaborators.

Task 8

The next day, Sherrie reviews the feedback she received. She notes that she needs to make a few updates to the spreadsheet and asks for your help responding to the leadership team.

Complete the following steps:

1.   Select **Open comment history** in the top right to easily view comments.
2.   Reply to one of the comments with a "thank you."
3.   Delete one of the comments.
4.   Resolve a comment.
5.   Mark an action item as done.
6.   Link to a comment by @mentioning your colleague in your reply.

Case wrap-up

Sitting at her desk, Sherrie opens her laptop and reviews the final version of her spreadsheet "On the Rise employee openings - North America - East region". She reflects on using Google Sheets and working collaboratively with her team. She was able to transform the numbers coming in from the stores across the North America - East region into practical insights. She and the On the Rise leadership can use these insights to help guide their recruitment efforts. Sherrie notes that this approach has been so successful it should be applied in other regions. The team can then proactively support the human resources needs of On the Rise.