# Use Google Forms with Google Sheets

## Task 1. Create a survey using Google Forms

On the Rise Bakery is expanding to a new city and wants to conduct market research. Help the staff to create a survey for prospective customers to share which foods they are interested in.

## **Open Google Forms**

- 1. To open Google Drive, click drive.google.com.
- 2. In the left panel, click + New, and then click Google Forms > Blank form.

A new web page containing a blank Google Form should open.

3. To name the form, in the upper-left corner, click **Untitled form**, and type **On the Rise Bakery Survey** 

Notice the updated file name also appears on the form.

4. For Form description, type The purpose of this survey is to gauge the pastries and other food items of interest to our potential customers.

## **Create survey questions**

- 1. Click **Untitled Question**, and then type **First Name** (required)
- 2. Change the question type from the default to **Short answer**.

- 3. To create a second question, click **Duplicate** ( $\square$ ).
- 4. Change the text to Last Name (required).
- 5. Click **Add question** ( $\bigoplus$ ), and then create three additional questions with these parameters:

| Question  | Answer Format  |
|---|--|
| Email Address   | Short Answer   |
| What are your favorite items to buy at a bakery? (Choose up to three) | Checkboxes with these five options:  Muffin Donuts Donut Holes Plain Bagel Bagel with Egg and Cheese |
| What time do you expect a bakery to open/close?                       | Short answer   |

## **Question Types**

Google Forms supports several question types. You can:

- Type an answer using short answer or paragraph text
- Choose a response from a list using multiple choice, checkboxes, or dropdown options
- Upload files
- Choose from a grid
- Select a date and time

To learn more, check out Choose a question for your form.

# Task 2. Submit survey responses

In this task, you submit sample entries to the Google Form to analyze in a later step.

## **Review sharing options**

- 1. Click **Publish**, and then click **Manage**. These settings let you choose which teammates can make changes to the form, and which people can simply provide their responses.
- 2. For **Responder view**, select **Qwiklabs** in the dropdown.
- 3. To publish the form to accept responses, click **Done** and then click **Publish**.

#### View and answer the survey

- 1. To view and respond to the survey in a new tab, click **Published**.
- 2. Select **Copy responder link** and then **Copy**.

Note: You can also choose Shorten URL to create a shorter, more manageable link for sharing.

- 3. To close the **Published options**, select **Save**.
- 4. In a new browser tab, open the survey using the link you copied.
- 5. Provide the following information in the survey response:

| Question       | Response                  |
|----------------|---------------------------|
| First Name     | Chigo                     |
| Last Name      | Williams                  |
| Email Address  | cwilliams@mail.com        |
| Favorite items | Bagel with Egg and Cheese |

| erred bakery hours | 5am-3pm |  |
|--------------------|---------|--|
|--------------------|---------|--|

#### 6. Click **Submit**.

- 7. To provide a second sample, click **Submit another response**.
- 8. Repeat steps 2 and 3 with the following information:

| Question               | Response             |
|------------------------|----------------------|
| First Name             | Lauren               |
| Last Name              | Rodriguez            |
| Email Address          | laurenr1980@mail.com |
| Favorite items         | Donuts, Donut Holes  |
| Preferred bakery hours | 6am                  |

- 9. To provide a third sample, click **Submit another response**.
- 10. Repeat steps 2 and 3 with the following information:

| Question      | Response         |
|---------------|------------------|
| First Name    | Josephine        |
| Last Name     |                  |
| Email Address | josieyu@mail.com |

| Favorite items         | Donuts, Donut Holes, Plain Bagel, Muffin |
|------------------------|--|
| Preferred bakery hours | 6am-12pm                                 |

Notice that you can submit the surveys despite missing required data such as last name and selecting more than the limit of three bakery items.

11. When all the survey responses have been submitted, close this tab.

# Task 3. Analyze survey data in Sheets

In this task, you explore a few Google Sheets functions. To learn more about functions, visit the Google Workspace Learning Center.

#### **Review survey responses**

- 1. Return to the editor view of your form. If you've exited, visit Google Forms to reopen it.
- 2. In the top pane, click **Responses**.

Your form should have three responses.

- 3. Click **Summary** for an overview of the survey responses in charts and tables.
- 4. Click **Question** to display the responses grouped by question.
- 5. Click the dropdown or arrows to display the responses to each question.
- 6. Click **Individual** to display the form submission for each respondent.

**Note:** You can insert charts from Google Forms into other Google Workspace products. See Embed linked Google Forms charts into Google Docs, Google Slides, and Google Drawings.

#### **View responses in Sheets**

- 1. On the **Responses** tab, in the upper-right, click **Link to Sheets** ( ).
- 2. In the **Select destination for responses** dialog, accept the default for **Create a new spreadsheet**, and click **Create**.

A new spreadsheet with the filename **On the Rise Bakery Survey** (**Responses**) should open.

3. At the bottom of the spreadsheet, click the down arrow next to the **Form Responses 1** label, and then click **Duplicate**.

## Analyze responses using OR

Follow this procedure in the duplicate sheet of your spreadsheet.

- 1. In cell G1, type **Missing Full Name?**
- 2. In cell G2, type or paste =**OR**(**ISBLANK**(**B2**), **ISBLANK**(**C2**))

This formula flags any rows that are missing a first name or last name.

- 3. Click cell G2, and then point to the small blue box in the lower-right corner of the cell until your cursor appears as a cross (+).
- 4. Drag your mouse down to the remaining rows in the column to apply the formula to those cells.

# **Analyze responses using COUNTIF**

- 1. In cell H1, type **Interest in Donuts**
- 2. In cell H2, type or paste =**COUNTIF**(**E2**,''\***Donuts**\*'')

This formula counts any cells in column E that contain the word Donuts.

3. Click cell H2, and then apply the formula to the remaining rows in the column.

## Task 4. Add response validation to a Google Form

In the earlier section, you bypassed a rule intended to require respondents to provide a first and last name. The response validation feature can help enforce the guidelines that you want respondents to adhere to.

#### Require responses to questions

When a question is required, a red asterisk appears next to the question. If you try to proceed without answering a required question, you're prompted to provide a response.

- 1. Return to the **On the Rise Bakery Survey** in Google Forms.
- 2. In the text of the first question, delete (**Required**), and then click the **Required** slider ( ) to enable it.
- 3. In the text of the second question, delete (**Required**), and then click the **Required** slider ( ) to enable it.
- 4. In the top pane, click **Settings**.
- 5. Underneath Question Defaults, click the Make questions required by default slider ( ) to enable it.

**Note:** This setting only applies to new questions and does not change the requirement for existing questions.

#### Add email validation

1. In the top pane, click **Questions**.

- 2. Select the third question to show editing options for email.
- 3. To display additional options, click more ( : ), and then select **Response** validation.
- 4. In the first dropdown that appears, select **Text**.
- 5. In the second dropdown, select **Email**.

#### Select "at most" validation

- 1. Select the fourth question to show more editing options.
- 2. Click more (:), and then select **Response validation**.
- 3. In the first dropdown that appears, select **Select at most**, and then for **Number**, type **3**

# Task 5. Show questions based on answers

In this task, you set up branching in the Google Forms survey so that respondents only see certain sections based on their answers.

## Use more answer types

- 1. In the text of the fifth question, delete /close, so the question now reads What time do you expect a bakery to open?
- 2. From the dropdown of question types, select O Time.
- 3. Click **Add question** ( ), and add a sixth survey question: **What time do you expect a bakery to close?**
- 4. From the dropdown of question types, select **Dropdown**, and then type the following answer choices:
  - 11 AM
  - 12 PM
  - 1 PM
  - 2 PM
  - 3 PM

#### Create a new section

- 1. To create a new section of the form, click **Add section** ( ).
- 2. Change the section title to **Afternoon Treats**
- 3. Click Add question ( ), and add a new question: What are your favorite items to buy at a bakery in the afternoon? (Choose up to three)
- 4. From the dropdown of question types, select **Checkboxes**, and then type the following answer choices:
  - Sandwich
  - Soup
  - Salad
  - Donuts
  - Plain Bagel
- 5. Click more (:), and then select **Response validation**.
- 6. In the first dropdown that appears, select **Select at most**, and then for **Number**, type **3**

**Note:** Google Forms supports rich text formatting which lets you add emphasis to your survey titles and descriptions. Visit the Google Workspace Updates blog to learn more.

## **Customize follow-up questions**

- 1. For the sixth question in Section 1 of the survey, which reads **What time do you expect a bakery to close?**, click more (:), and then select **Go to section based on answer**.
- 2. From the dropdown next to **11 AM**, select **Submit form**.
- 3. To view and respond to the survey in a new tab, click **Published**.
- 4. Select Copy responder link and then Copy.
- 5. In a new browser tab, open the survey using the link you copied.

- 6. Answer the survey questions with responses of your choice, and for the bakery closing time, select **11 AM**.
- 7. Click **Next**, and then click **Submit**.

Notice that you are not asked the question about afternoon snacks.

- 8. Click **Submit another response**.
- 9. Answer the survey questions in Section 1 with responses of your choice, and for the bakery closing time, select **12 PM** or later.
- 10. Click **Next**, and then answer the question in Section 2.
- 11. Click Submit.

## (Optional) Analyze data using IF and IFS

The *IF* function evaluates a logical expression. You can use *IF* to display a particular value when the expression is TRUE and another if it's FALSE. The *IFS* function evaluates multiple logical expressions.

- 1. To make a copy of the spreadsheet with sample survey responses, click On the Rise Bakery Survey (Responses).
- 2. At the top, click **File > Make a copy**, and then click **Make a copy** to save the copy of the sheet.
- 3. In cell I1, type Respondents with the same morning and afternoon food preferences
- 4. In cell I2, paste or type **=IF(E2=H2,''I enjoy the same foods.'')**

This formula identifies the respondents who indicated the same food choices in the morning and afternoon.

- 5. Apply this formula to the rest of the rows in column I.
- 6. In cell J1, type **Opening Times**

7. In cell J2, paste or type =IFS(F2<time(6,0,0), "Very Early Morning",F2<time(8,0,0), "Early Morning",F2<time(10,0,0), "Mid Morning")

This formula sorts the opening times provided in the survey into three categories:

- For opening times before 6 AM, the text is *Very Early Morning*.
- For times between 6 AM and 8 AM, the text is *Early Morning*.
- For times between 8 AM and 10 AM, the text is *Mid Morning*.
- 8. Apply this formula to the remaining rows in the column.