

Learner Full Name: _____ School: _____
Assigned Workstation: _____ Class: _____

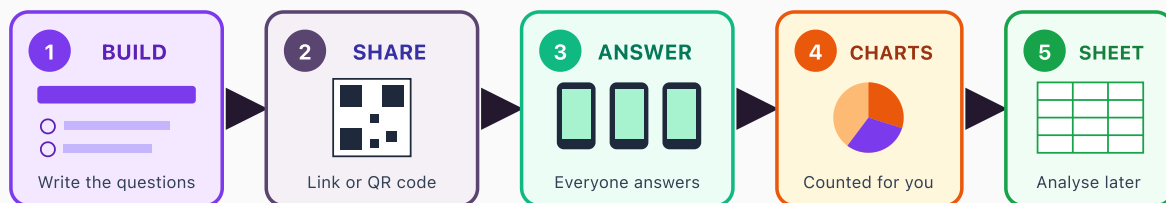
Session 21: Online Forms & Surveys

In Session 14 you *filled in* an online form. Today you swap sides: you will **build** one. You will make a real **survey** (a set of questions you ask many people) about your class, share it with a link or a QR code, collect your classmates' answers and watch them turn into charts. Next session, in Spreadsheets 3, you will analyse those answers like a real data scientist.

1. Plain Talk: The Class Prefect's Notebook

Imagine your class prefect must find out every pupil's favourite local food for the end-of-term party. She walks round with a notebook: "Kofi, what do you like? Esi? Yaw?" It takes the whole of break time. Then she counts the ticks, loses her place, and counts again. Two pupils were absent, so she has to chase them tomorrow.

An **online form** does the same job in a smarter way. The prefect types the question once and sends one link to the class WhatsApp group. Everyone answers on their own phone or computer, whenever they are free, and the form **counts the answers and draws the chart by itself**. Nobody loses their place.



Today: steps 1 to 5. Session 22: you analyse the sheet.

Figure 21.1: The journey of a survey, from your questions to a spreadsheet full of answers.

💡 THE TOOL WE USE: GOOGLE FORMS

Google Forms is free and works in any web browser. Sign in with the **Hub's learning account** your mentor gives you, never your own or a parent's account. Go to **forms.google.com** and click **Blank form** (the big + box). Microsoft Forms works in a very similar way.

1. Seven Question Types

Every question in Google Forms has a **type**. You choose it from the drop-down box at the top right of the question. The right type makes the form easy to answer *and* easy to count.

Figure 21.2 shows seven examples of Google Forms question types:

- Short answer:** "How many minutes to school?" with a text input field containing "25".
- Paragraph:** "What would make our school better?" with a multi-line text input field.
- Date:** "Which day can you help?" with a date input field showing "dd/mm/yyyy".
- Multiple choice (pick ONE):** "How do you travel to school?" with radio button options: "Walk", "Trotro or bus" (selected), and "Taxi".
- Checkboxes (pick MANY):** "What do you do after school?" with checkbox options: "Homework", "Play sport", and "Help at home".
- Drop-down (pick ONE from a list):** "What class are you in?" with a dropdown menu showing "JHS 2".
- Linear scale (a number on a scale):** "How much do you enjoy Tech Club?" with a scale from 1 to 5. The scale is labeled "Not at all" at 1 and "Very much!" at 5. The 5th option is selected.

Figure 21.2: What each question type looks like to the person answering.

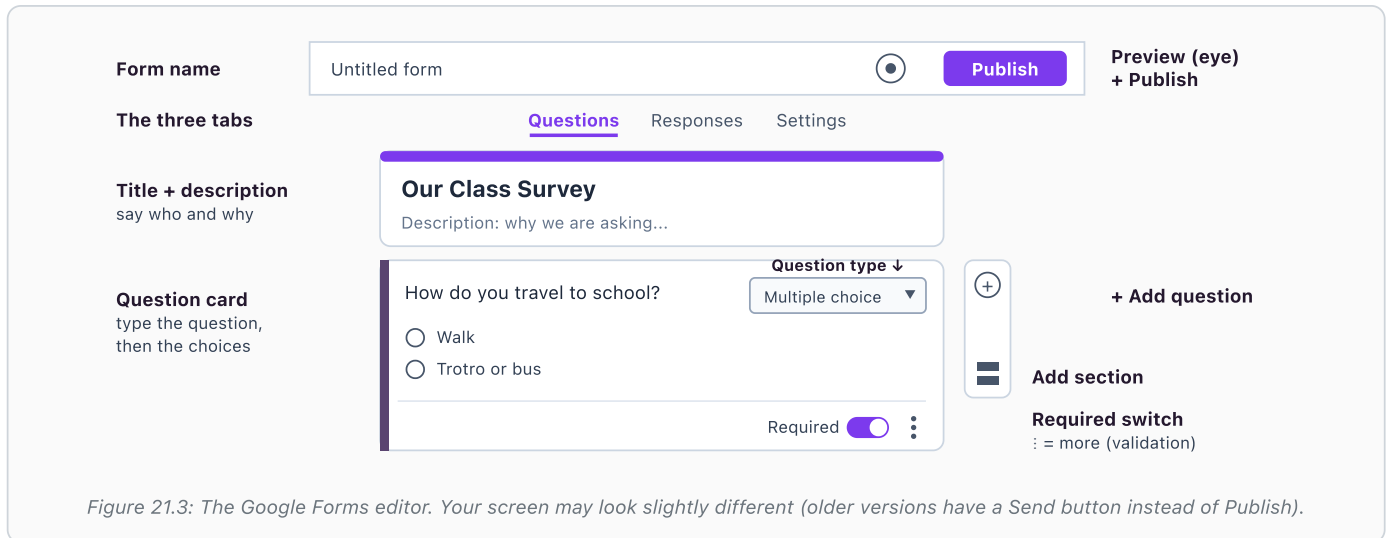
💡 CHOICES ARE EASIER TO COUNT THAN TYPING

If ten pupils type their favourite food, you may get "jollof", "Jollof rice", "JOLLOF" and "jolof": four spellings the computer counts as four different foods! A **multiple choice** question with an **Other** option keeps the answers tidy. Use short answer or paragraph only when you really need people's own words.

2. Your Turn: Pick the Best Type

Question	Best question type
a) Which of these subjects do you enjoy? (They may enjoy several.)	
b) Which region of Ghana were you born in? (A list of 16 regions.)	
c) On a scale of 1 to 5, how safe is the road outside our school?	
d) Do you have a computer at home? (Yes / No)	
e) Describe the best day you ever had at school.	

1. Find Your Way Around the Form Editor



2. Five Tools That Make a Form Work Well

- 1 **Required:** switch it on for questions everyone must answer. A red star (*) appears and the form will not send until it is answered. Leave "extra" questions optional.
- 2 **Sections:** click **Add section** to split a long form into pages ("About you", "Food & free time"). Shorter pages feel easier to finish.
- 3 **Response validation:** on a short answer question, click : → **Response validation** → **Number** → **Between** → 1 and 100. Now nobody can type "a lot" or 5000. Add a helpful error message, like "Please type a number from 1 to 100."
- 4 **Settings tab → Responses:** set **Collect email addresses** to **Do not collect** for a class survey. **Limit to 1 response** stops people answering twice, but everyone must then sign in with a Google account. Leave it **off** today, because classmates share Hub accounts.
- 5 **Preview:** click the **eye** icon and answer your own form as a stranger would. Is every question clear? Does the validation work? Fix it before anyone else sees it.

1. Asking Fairly: The Survey Maker's Promise

When people answer your survey, they trust you with information about themselves. A good survey maker keeps four promises:

ASK ONLY WHAT YOU NEED

For a party food survey you do not need names, phone numbers, home towns or birthdays. Every extra question is extra personal data to protect. Google already records the time of each answer, so you don't even need a date question.

SAY WHY YOU ARE ASKING

Use the form description: *"The Tech Club is asking about travel and food to practise data skills. Answers are anonymous and only our class will see the totals."*

KEEP ANSWERS PRIVATE

Share the **totals** ("12 of us walk"), never one person's answers. Don't screenshot or forward someone's response.

NO TRICKS, NO PRESSURE

Answering is a choice. Write questions that don't push an answer: not *"Don't you agree jollof is the best?"* but *"What is your favourite local food?"*

2. Share by Link or QR Code

Before you publish, click **Manage** → **Responders** → **Anyone with the link** (otherwise people outside the school's accounts see "You need permission"). Click **Publish**. Then click **Published** → **Copy responder link** (tick **Shorten URL** for a short forms.gle link; in older versions: **Send** → the link icon → **Shorten URL** → **Copy**). Paste the link into the class chat or an email. For a **QR code**, open the link in Chrome, click the : menu → **Cast, save and share** → **Create QR code**, and download it. Print it on a poster and people answer by pointing a phone camera at it.

3. Read the Results

Open the **Responses** tab. **Summary** shows a chart for every question; **Individual** shows one person's answers at a time.

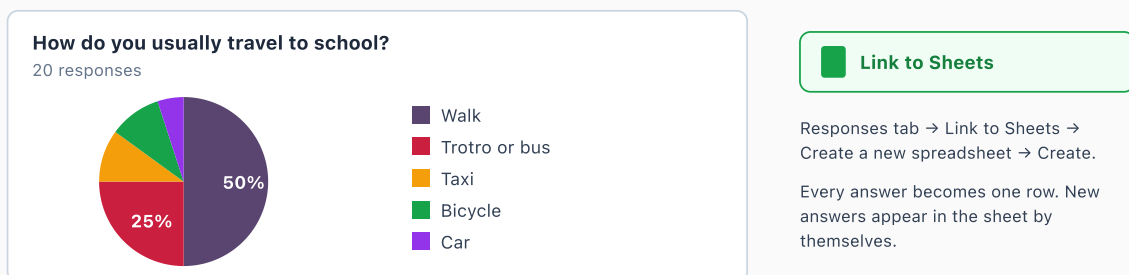


Figure 21.4: The Summary tab draws the chart for you. "Link to Sheets" sends every answer into a spreadsheet.

Your turn: look at Figure 21.4. Write one sentence about what the chart tells you.

1. Lab Mission: Build, Share and Collect a Real Survey

First, try the **Survey Builder** 3D lab on your session page: build a survey with different question types, share it, watch answers arrive and see them turn into a chart. Then, with your partner, build the real thing in Google Forms. Your answers will be the data for Session 22.

- 1 Start:** sign in to the Hub learning account → **forms.google.com** → **Blank form**. Title: Our Class Survey (Pair ____). Description: say who you are, why you are asking, and that answers are anonymous.
- 2 Section 1 "About you":** (a) *What class are you in?* Drop-down: JHS 1, JHS 2, JHS 3. (b) *How do you usually travel to school?* Multiple choice: Walk, Trotro or bus, Taxi, Bicycle, Car, plus **Add "Other"**. (c) *How many minutes does it take you to get to school?* Short answer with **validation: number between 1 and 100**. Make all three **Required**.
- 3 Add section 2 "Food & free time":** (d) *What is your favourite local food?* Multiple choice: Jollof, Waakye, Fufu, Banku, Kenkey, Red-red, Other. (e) *What do you do after school?* Checkboxes: Homework, Help at home, Play sport, Watch TV, Read. (f) *How many hours were you on a screen (phone, TV, computer) yesterday?* Short answer, number between 0 and 24. (g) *How much do you enjoy Tech Club?* Linear scale 1–5. (h) *One idea to make our school better:* Paragraph, not required.
- 4 Settings and preview:** Settings → Responses → email addresses: **Do not collect**. Preview (eye icon), answer it once yourself and test the validation by typing 500.
- 5 Survey swap:** Publish, copy the link and give it to your mentor (or make a QR code). Answer at least **4 other pairs'** surveys honestly. Then open **Responses** → **Summary**, and click **Link to Sheets** → **Create a new spreadsheet**.

Check	My answer
How many question types did we use?	-----
What happened when we typed 500 for the minutes?	-----
How many responses did we collect?	-----
Our prediction: the most popular food will be...	-----
The real most popular food (from the Summary tab)	-----
Name of our linked spreadsheet	-----

⚠️ "MY FORM SAYS IT IS NOT ACCEPTING RESPONSES"

You may not have published it yet, or **Accepting responses** is switched off. Click **Published** (top right) → turn **Accepting responses** on → **Save**. (Older screens: the Responses tab.) If classmates are asked to sign in, check that **Limit to 1 response** is off.

1. True or False?

Statement	True	False
Checkboxes let people choose more than one answer.	☐	☐
A survey about favourite foods should ask for everyone's full name and phone number.	☐	☐
Response validation can stop someone typing 5000 when you asked for a number from 1 to 100.	☐	☐
It is fine to post a screenshot of one classmate's answers in the group chat.	☐	☐
"Link to Sheets" puts every response into a spreadsheet, one row per person.	☐	☐

2. Written Review Questions

Question 1: Why is "What is your favourite local food?" better as a multiple choice question than a short answer question?

Question 2: Kwame wants to ask "Don't you think the canteen food is terrible?" Rewrite his question so it is fair.

3. Self-Assessment & Mentor Sign-Off

Tick the column that reflects your confidence at the end of Session 21:

Online Forms Competency	With Help	Almost Alone	All By Myself!
1. I can build a Google Form and choose the right question type for each question.	☐	☐	☐
2. I can use required questions, sections, response validation and settings.	☐	☐	☐
3. I can share a form by link or QR code, read the Summary charts and link it to Sheets.	☐	☐	☐
4. I can explain how to ask fairly: only what you need, say why, keep answers private.	☐	☐	☐

Mentor Signature: _____

Date Completed: _____