

Data is all around us. We can find it in our lunchboxes, our games, and even our sleep. Let's explore how we can collect, understand, and use data.



**1. What is data?**

- a. A sandwich
- b. 8 hours of sleep
- c. A school bag
- d. A pencil box

**2. Which of these is something you can count and turn into data?**

- a. The smell of lunch
- b. Number of students wearing glasses
- c. The sound of the bell
- d. The color of your shoes

**3. Which tool helps you make a chart or graph?**

- a. Google Sheets
- b. Google Maps
- c. Google Earth
- d. Google Translate

**4. Why do you think computers like numbers more than pictures?**

**5. If you were a robot in class, what kind of data would you collect to help the teacher?**

**Application Based Questions**

**6. Write 2 ways your school uses data.**

**7. What kind of data could your teacher collect during a science experiment? (choose all that apply)**

- |                             |                               |
|-----------------------------|-------------------------------|
| a. Temperature              | b. The name of the experiment |
| c. Plant height             | d. The number of drops        |
| e. A guess about the result | f. Time                       |

**8. How can data help you become a better student?**

**9. Imagine your school wants to save electricity. What data should they collect? (choose all that apply)**

- The school's mascot.
- The electricity bill from each month.
- The number of lights left on in empty classrooms.
- The number of students who eat lunch in the cafeteria.
- The colour of the school walls.
- The amount of time computers are left on overnight.

**10. How do you know if the data you collected is helpful or just random? (choose all that apply)**

- It is easy to find on the internet.
- It answers the question you were trying to solve.
- It is organised in a way that makes sense, like in a table or a chart.
- It is written in your best handwriting.
- It includes your favourite numbers.
- It helps you make a clear decision or a good prediction.

**11. What could happen if someone uses the wrong data to make a decision? (choose all that apply)**

- a. The decision they make might not solve the problem.
- b. They might get a gold star for trying.
- c. They could spend money on something that isn't needed.
- d. The result might be the opposite of what they wanted to happen.
- e. The school day might get shorter.

**12. A smartwatch tells you how many steps you walked today.**

- How do you think it knows that?

- What else could it track?



**13. Match the activity with the type of data.**

Activity	Data Type
School Attendance	Number
Favourite Subject	Text
Homework Done?	Yes/No
Books Read	Text
Student Names	Yes/No

**14. Match the tool with what it helps you do:**

Tool	Use
Google Sheets	Make a chart
Google Forms	Collect answers
Google Docs	Write a story
Google Slides	Make a presentation

**15. Why is it important to use the right tool for the right kind of data?****16. If you had to teach a robot to sort books, what kind of data would it need?****17. What could go wrong if you mix up numbers and text in your data?**



## Understanding Data in Google Sheets

### 1. What is a cell in Google Sheets?

- a. A battery
- b. A box where you write data
- c. A box where you write data
- d. A phone signal

### 2. What does a column look like in Google Sheets?

- a. A row going sideways
- b. A tall stack going up and down
- c. A circle
- d. A diagonal line

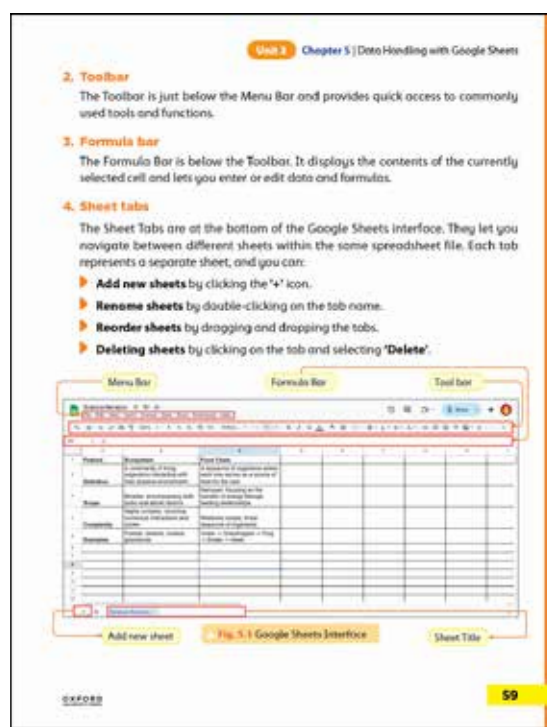
### 3. Why do you think Google Sheets is useful for organising data?

### 4. Look at the screenshot of Google Sheets. Label the following parts:

Cell	Row	Column
Formula Bar	Toolbar	

### 5. Fill in the blanks

- a. To enter data, I click on a \_\_\_\_\_.
- b. The \_\_\_\_\_ bar shows the formula I'm typing.
- c. A \_\_\_\_\_-\_\_\_\_\_ is where a row and a column meet.
- d. Charts turn numbers into pictures so we can spot \_\_\_\_\_ quickly.
- e. Sorting and \_\_\_\_\_ are useful to find what we need faster and make big data easier to understand.



6. What happens when you sort data in Google Sheets?
  - a. It disappears
  - b. It gets arranged in order
  - c. It turns into a chart
  - d. It becomes a game
7. Which tool helps you see only the data you want?
  - a. Zoom
  - b. Filter
  - c. Copy
  - d. Paint
8. What does AI use to learn and make decisions?
  - a. Magic
  - b. Paintings
  - c. Dreams
  - d. Data
9. Which of these is a smart way to use data in school?
  - a. Guessing who is absent
  - b. Drawing cartoons
  - c. Asking random questions
  - d. Using attendance data to track who's missing
10. What should we be careful about when using data from people?



### Sequencing

**1. Arrange the steps to open a template and prepare it for use:**

- |                                  |                                    |
|----------------------------------|------------------------------------|
| • Click on 'File'                | • Rename the file                  |
| • Select 'New'                   | • Customize the template           |
| • Choose 'From template gallery' | • Save your work                   |
| • Browse available templates     | • Open the spreadsheet application |
| • Click on the desired template  |                                    |

Blank area for sequencing steps.

**2. Why is it important to rename and save your template after customising it?**

Blank area for answer to question 2.



### Application-Based Questions

**3. Ali wants to track his daily water intake and exercise routine.**

- Which template should he use in Google Sheets?

Blank area for answer to question 3, part 1.

- What columns might he need?

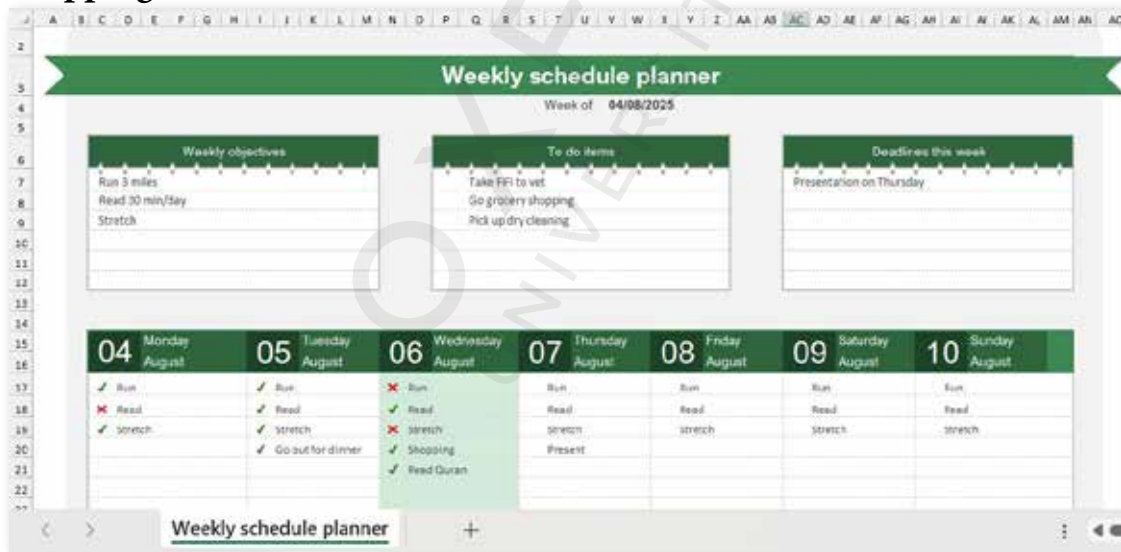
Blank area for answer to question 3, part 2.

4. Sara is organising a group project with her classmates. She needs to assign tasks and track progress.

- Which template would help her in Microsoft Excel?

- How can she customise it?

5. You are planning a birthday party and want to manage the guest list, budget, and shopping list.



- Which template would you choose in Google Sheets?

- What sections would you add?



6. What changes would you make to a 'Weekly Schedule' template to make it match your school week?



7. How can using a template help you stay organised in school?



8. Look at the homework tracker a teacher has made to make notes of her students submissions.

Student Name	Subject	Assignment	Due Date	Completion Status	Notes
Ali Shafi	Math	Chapter 3 Review	8/8/2025	<input type="checkbox"/>	Practice multiplication facts
Bilal Hasan	Science	Plant Life Cycle Diagram	8/9/2025	<input type="checkbox"/>	Use colorful drawings
Laiba Shafiq	English	Short Story Draft	8/10/2025	<input type="checkbox"/>	Focus on descriptive language
Dawood Rehman	History	Famous Explorers Report	8/11/2025	<input type="checkbox"/>	Include at least 3 explorers
Javeria Munaf	Art	Self-Portrait	8/12/2025	<input type="checkbox"/>	Use any medium you like
Carmel Reilly	Music	Instrument Practice	8/13/2025	<input type="checkbox"/>	30 minutes daily

Imagine you are creating a 'Homework Tracker' template for yourself. What features would you include? Fill out the sheet.

Data	Subject	Assignment			

**9. Match the features with its function.**

Term	Definition Letter
Template	A vertical section in a spreadsheet
Customize	A collection of pre-made templates
Spreadsheet	A digital tool used to organise data
Column	To change something to suit your needs
Gallery	A pre-designed layout for a specific task



### Application-Based Questions

1. Your class wants to choose a place to go for a picnic. You're making a Google Form to help everyone vote. Make three questions that are:

- Easy to understand and fair for everyone
- Helpful for picking the best place
- Do not ask for personal stuff like names

1

2

3

2. What kinds of questions should you not ask in a class survey, and why?

3. Study the table below and answer the questions.

Fruit	Number of Students
a. Apple	8
b. Banana	12
c. Mango	10
d. Orange	5
e. Grapes	7



- a. Which fruit is most popular?

- b. How many students chose bananas?

- c. What is the total number of responses?

- d. Which fruit had the fewest votes?

- e. Label the pie chart correctly.

blue	<input type="text"/>
orange	<input type="text"/>
green	<input type="text"/>
sky blue	<input type="text"/>
purple	<input type="text"/>

- f. If five kids accidentally filled out the form two times, how would that change your results?



4. **You want to find out what kinds of new books the school library should get. What's the best and easiest way to hear everyone's ideas?**

- Go to each classroom and ask every single student, one by one.
- Create a fun online form that students can fill out on a computer.
- Stand at the school entrance and shout the question to everyone.
- Ask your three best friends and use their answers for the whole school.

5. **Your class is making a time capsule. Someone says you should collect a Google Form from each student that asks for their full name, home address, and a secret wish. Why could that be a bad idea?**
  - a. It might take too long to read all the answers.
  - b. The paper might get wrinkled inside the time capsule.
  - c. Someone might see the private info and use it in a way that's not safe.
  - d. The teacher might not be able to fit all the forms in the time capsule.
6. **You are making a survey to find out what new sports equipment your class wants. How can you make sure it's fair and includes everyone?**
  - a. Only show pictures of sports that the most popular students play.
  - b. Use big words and long sentences to sound smart.
  - c. Include lots of different sports and let students write their own ideas, too.
  - d. Make only the boys in class fill out the survey.
7. **What happens when you link a Google Form to a Sheet?**
  - a. It deletes the form.
  - b. It makes a chart.
  - c. It saves all the responses in the sheet.
  - d. It helps you look at answers quickly and sort them easily.
8. **What is one thing Google Forms cannot do very well when used for surveys?**
  - a. It collects responses right away.
  - b. It can be shared by email.
  - c. It might not show how someone feels or explain their thoughts in detail.
  - d. It lets people answer without saying who they are.



### Spreadsheet Skills

9. **You have a list of items with quantities and unit prices. How would you calculate the total cost for each item in Google Sheets?**
  - a. Type the total manually
  - b. Use the formula  $\text{=Quantity} * \text{Unit Price}$
  - c. Use Smart Fill to guess the total
  - d. Copy and paste from a calculator

- 10. You want to know how much money you spent in total. Which formula should you use in Google Sheets?**
- `=MAX()` – shows the biggest number.
  - `=SUM()` – adds up all the numbers.
  - `=COUNT()` – tells how many numbers there are.
  - `=AVERAGE()` – finds the middle value.
- 11. You want to mark all the items that cost more than Rs. 1000. Which tool in Google Sheets can do this for you automatically?**
- Filter
  - Conditional Formatting
  - Smart Fill
  - Pivot Table
- 12. You want to sort your purchases by date. Which tool should you use?**
- Chart Wizard
  - Sort Range
  - SUM function
  - Smart Cleanup
- 13. You used a tool to highlight items that cost more than Rs. 1000, but nothing got highlighted. What could be the reason? (Pick two)**
- The numbers are written as text, not real numbers.
  - The rule you used might be wrong.
  - The sheet is locked.
  - The chart type is wrong.
- 14. A student copied a formula but got the wrong answer. What might be the problem?**
- The cell references are wrong.
  - The formula is correct.
  - AI made a mistake.
  - The chart type doesn't match.
- 15. Smart Fill says 'Orange Juice' is a fruit. What should you do?**
- Accept it without checking.
  - Change it to 'Beverage' yourself.
  - Delete the entry.
  - Ask a friend to decide.

- 16. You have first names and last names in two columns. You want to join them into one. What's one good thing about using Smart Fill?**
- It writes a story about each student.
  - It quickly sees the pattern and fills in the rest.
  - It makes the cells sparkle.
  - It prints the list for you.
- 17. You asked AI to sort your favorite books by author's last name, but it sorted them by number of pages. What does this show about AI?**
- It can read your mind.
  - It's always right.
  - It needs clear instructions and cannot guess what you want.
  - It's too fast to stop.
- 18. You are using an AI tool to help you with your class's bake sale spreadsheet. It suggests a list of prices for each baked good. When should you double-check the prices given by the AI?**
- Only when you have extra time and are feeling bored.
  - When the total seems too high or too low.
  - Only for the items you do not like.
  - When the numbers are all the same.
- 19. Your teacher asks why it's important to learn how spreadsheet formulas work instead of letting AI do everything. What's the best reason?**
- So you can teach the AI how to be smarter.
  - So you can showoff to your friends.
  - So you can find and fix mistakes and make sure the answers are correct.
  - So you can tell the AI it did a bad job.
- 20. You are using a spreadsheet to help organise a food drive. How can you be careful and responsible?**
- Use lots of bright colours and funny fonts to make it more fun.
  - Always check your math and don't share private info about students who donated.
  - Add pictures of all the food that was donated.
  - Only use the spreadsheet on your phone and never on a computer.