Unit 6 · Information and Data

WORKSHEET

Full marks 29

Name _____ Class _____ Roll no. ____ Date _____ Marks _____ / 29

1 Key words [4]

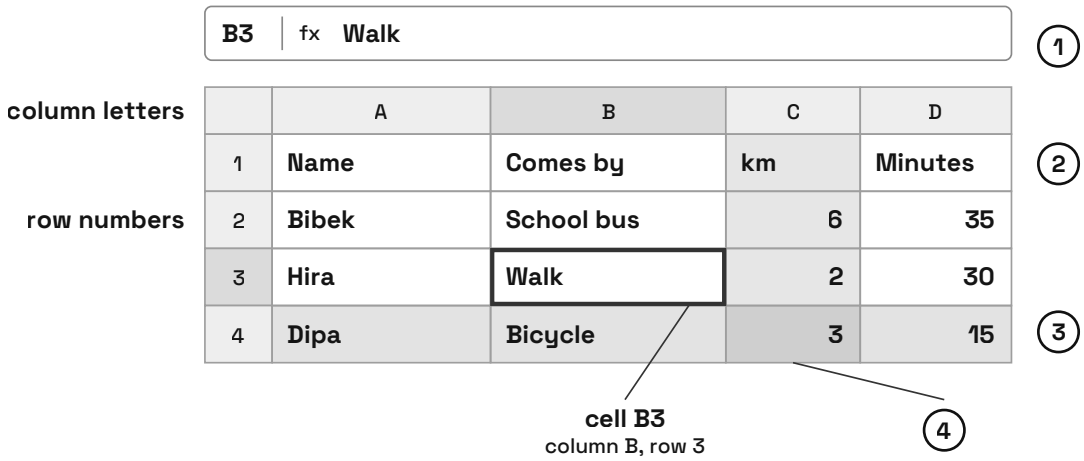
Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

ascending	**cell**	**chart**	**data**	**descending**	**field**	**formula**	**information**	**record**	**survey**

Facts as they were recorded, before anyone has made sense of them, are _____. Data that has been organized so that it answers a question is _____. Asking a group of people the same questions and recording their answers is a _____. In a table, a row that holds everything about one thing is a _____, and a column that holds one kind of fact is a _____. In a spreadsheet, each box of the grid is a _____. An instruction that works out a value, and always starts with =, is a _____. Putting records in order from smallest to largest is sorting them _____.

2 Label the diagram [2]

The diagram shows the parts of a spreadsheet. Write the name of each numbered part. Each carries 0.5 mark.



1. _____ 2. _____

3. _____ 4. _____

3 Multiple choice [5]

Choose the correct option for each of the following questions.

i. What turns data into information? [1]

a. storing it in a bigger file
b. organizing and processing it so that it answers a question
c. typing it faster
d. printing it on paper

ii. A table of students is sorted by **Minutes**, descending. Who comes first? [1]

a. the student whose name comes first in the alphabet
b. the student who lives nearest
c. the student whose trip takes the longest
d. the student whose trip takes the shortest

iii. The prices of 8 items are in cells B2 to B9. Which formula gives their total? [1]

a. `SUM(B2:B9)`
b. `=B2-B9`
c. `=SUM(B2:B9)`
d. `=COUNT(B2:B9)`

iv. Which question is best answered with a **pie chart**? [1]

a. How many runs did each player score in a cricket match?
b. What share of a family's monthly spending goes on food?
c. What was the rainfall in each month in Pokhara?
d. How tall is each student in the class?

v. A bar chart's axis starts at 50. One bar reaches 60 and another 70. How do the bars look? [1]

a. the second exactly as tall as the first
b. the second a little taller than the first
c. the second twice as tall as the first, though 70 isn't twice 60
d. both bars cut off at the top

4 Survey questions [2]

Write a short answer to the following question.

A survey asks: "How long does your trip to school take? ☐ 0–10 minutes ☐ 10–20 minutes ☐ 20–30 minutes". Find two problems with the answer choices, and write better ones.

5 Spreadsheet formulas [4]

A momo shop keeps the plates it sold in a spreadsheet. The days are in A2 to A8 and the plates in B2 to B8.

Row	A	B
1	Day	Plates
2	Sunday	40
3	Monday	35
4	Tuesday	28
5	Wednesday	30
6	Thursday	45
7	Friday	52
8	Saturday	64

Write the formula, and the answer it gives, for:

i. the total plates sold in the week;
ii. the average plates sold in a day;
iii. the most plates sold in one day.
iv. Tuesday's number was wrong: it should be 35. What happens to the three answers when it is corrected in B4?

6 Find and fix the mistake [3]

Each formula below was meant to add up the plates in B2 to B8, but each gives a wrong answer. Say what is wrong with each, and write it correctly.

i. `SUM(B2:B8)`
ii. `=SUM(B2-B8)`
iii. `=SUM(B2:B7)`

7 Sorting [2]

Sort the table by **Marks**, descending.

Name	Marks
Rita	64
Bikram	81
Sunita	77
Dorje	90

Write the sorted table here.

Name	Marks

Why must the names move with the marks?

8 Charts [5]

Show your working.

a. In a survey of 20 students, 8 like football best, 6 like cricket, 4 like volleyball and 2 like basketball. Work out each sport's share as a percentage. [2]

Answer:

b. Draw a bar chart of the same survey on the squared paper, one square for each student, with the bars standing on the bottom line. Write a title for it, and name both axes. [3]

One square is one student.

9 Think [2]

Think, then answer.

A tea shop's poster has a bar chart: "Our tea: 60 cups a day. The shop next door: 55 cups." The axis starts at 50, so the shop's bar looks twice as tall as its neighbor's. What is misleading about the chart? How would you draw it honestly?

10 Activity: A survey of my class (not marked)

Ask everyone in your class: "How do you usually come to school?" Give the choices below. Count the answers with tally marks, then write each count and work out its share of the class.

Comes by	Tally	Number of students	Share (%)
Walk			
Bicycle			
Motorbike			
School bus			
Public bus or tempo			
Other			
Total			100%