

Worked Examples

Statistics

Year 4

Instructions

A pupil has been given a set of questions to answer. They tried their best but think they have got some answers wrong.

Go through the work and check the answers. Help the pupil to understand their errors by explaining where they have gone wrong or how to find the correct answer (there are prompts below the questions to help you).

Note that you will not always be asked to provide the correct answer.

1

How many more people voted for pasta and pizza than salad?

Favourite Food	Number of Votes
Pizza	6
Salad	7
Pasta	8
Ice Cream	9

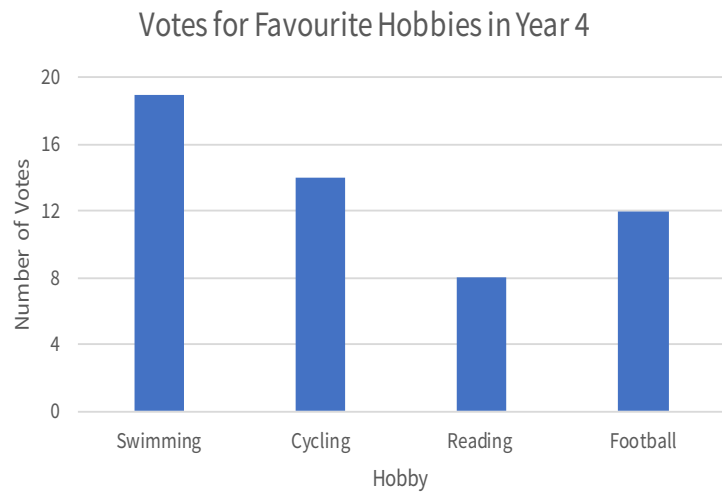
$$8 - 7 = 1$$

1

This answer is: ☐ Correct ☐ Incorrect

If incorrect, what should the answer be?

2 How many people voted altogether?



52

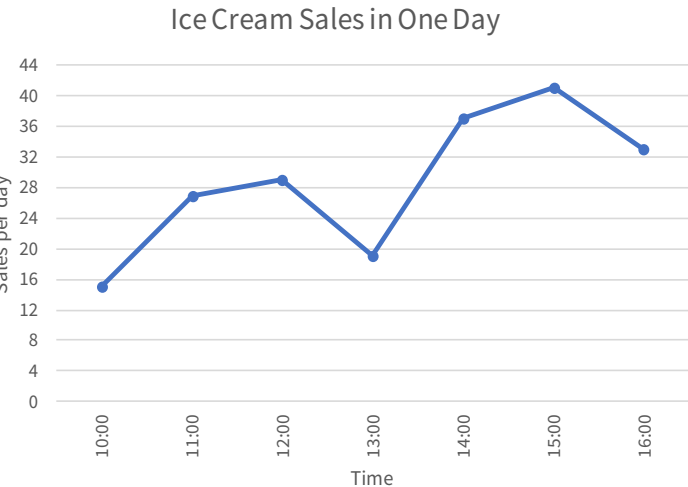
This answer is: ☐ Correct ☐ Incorrect
If incorrect, explain the error.

3 Use the bar chart. What is the difference between the most and least popular hobby?

6

This answer is: ☐ Correct ☐ Incorrect
If incorrect, what should the answer be? Explain.

4 On which day were there the most sale of ice creams?



15:00

This answer is: ☐ Correct ☐ Incorrect
Explain what type of data is recorded on a line graph.

5 How many sales were made between 10:00 and 13:00?

34

This answer is: ☐ Correct ☐ Incorrect
If incorrect, what should the answer be? Explain.

Answers

Q no.	Question	Correct/ Incorrect	Error/ Additional Guidance
1	How many more people voted for pasta and pizza than salad? 1	Incorrect	The pupil has calculated the difference between pasta and salad. They have not found the difference between the votes for pasta and pizza together and salad. Correct answer – 7
2	How many people voted altogether? 52	Incorrect	The pupil has misread a value on the bar chart. They have read swimming as 18, not 19. As the scale increases by 4, it is slightly harder to read. Correct answer - 53
3	Use the bar chart. What is the difference between the most and least popular hobby? 6	Incorrect	The pupil has used the wrong data to answer the question. Instead of using 19 (swimming) and 8 (reading) they have used 14 (cycling) and 8 (reading). Correct answer – 11
4	At which time were there the most sales? 15:00	Correct	The pupil has correctly identified that the most sales were made at 15:00. The prompt asks the pupil to explain what type of data is recorded on a line graph. Line graphs show continuous data over time. In this case the line graph records the ice cream sales (continuous data) over a day (time).
5	How many sales were made between 10:00 and 13:00? 34	Incorrect	The pupil has added the totals for Monday (15) and Thursday (19) instead of finding the totals for Monday (15), Tuesday (27), Wednesday (29) and Thursday (19). Correct answer - 90