

Worked Examples

Statistics

Year 3

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

Which type of pet is owned by the most boys and girls together, according to the table?

Type of Pet	Boy Owners	Girl Owners
Dog	9	10
Cat	13	8
Rabbit	3	7
Bird	5	5

Cat

This answer is: ☐ Correct ☐ Incorrect

Prove this answer is correct/ incorrect.

2 The pictogram shows votes for favourite lessons in a Year 3 class. How many people voted for maths?

Lesson	Votes for favourite lesson by Year 3
Literacy	
Maths	
History	
Art	

 = 2 children

4

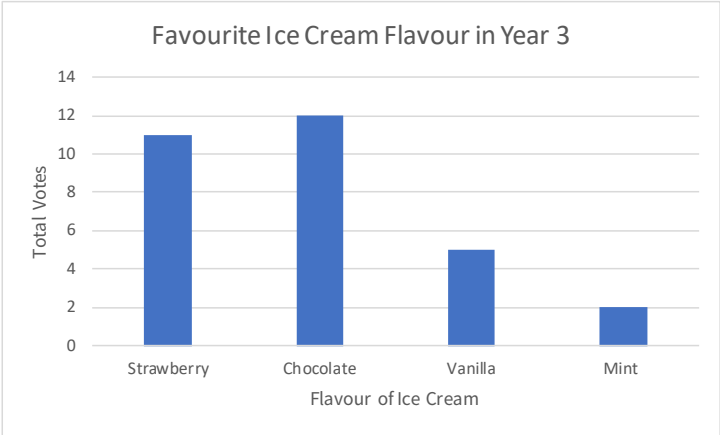
This answer is: ☐ Correct ☐ Incorrect
If incorrect, explain the error.

3 Using the pictogram, how many children voted for literacy and art altogether?

12

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

4 Using the bar chart, what is the difference between the number of votes for chocolate and the number of votes for mint?



7

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

5 Using the bar chart, how many children voted for vanilla and strawberry altogether?

8

This answer is: ☐ Correct ☐ Incorrect
Is this a reasonable answer? Explain why/ why not.

Answers

Q no.	Question	Correct/ Incorrect	Error/ Additional Guidance
1	Which type of pet is owned by the most boys and girls together, according to the table? Cat	Correct	The pupil has correctly identified that cats are the most common pet on the table. To solve this question, the pupil needed to find the totals of boy and girl owners.
2	The pictogram shows votes for favourite lessons in a Year 3 class. How many people voted for maths? 4	Incorrect	The pupil has not used the key to inform their answers. They have assumed that a whole star represents one pupil instead of two. Correct answer – 8
3	Using the pictogram, how many children voted for literacy and art altogether? 12	Incorrect	The pupil has recognised that one star represents 2 children. However, they have only counted the whole stars. They have not understood that half a star represents one child and have instead ignored this data. Correct answer - 14
4	Using the bar chart, what is the difference between the number of votes for chocolate and the number of votes for mint? 7	Incorrect	The pupil has misread the table. They have used the information for the votes for chocolate and vanilla, instead of chocolate and mint. Correct answer – 10
5	Using the bar chart, how many children voted for vanilla and strawberry altogether? 8	Incorrect	The pupil has misread the scale along the y-axis. They have read it as increasing in ones, not twos. They have therefore found half of the total votes required. The answer is not reasonable as the total votes for strawberry alone are 11, which is below 8. Correct answer - 16