

Max's Magnificent Maths Statistics Challenge

Learning objective: To interpret and present data using bar charts, pictograms, and tables, and to solve comparison, sum, and difference problems using information presented in scaled bar charts.

Help Max the monkey solve these data puzzles! Read each question carefully and circle the correct answer or write your answer clearly on the line provided.

Answer Key: 1.C, 2.True, 3.Bar chart, 4.B, 5.False, 6.35, 7.A, 8.True, 9.10, 10.C. Explanations: 6. $10+15+10=35$. 9. $25-15=10$.

Word bank: Bar chart · Pictogram · Data · Tally · Scale · Frequency

1. 1. Max is counting fruit. Which of these is the best way to record counting as you go? A) A bar chart B) A pie chart C) A tally chart* D) A map (1 mark)

2. 2. True or False: In a pictogram, one symbol can represent more than one item if the key says so. (1 mark)

3. 3. What do we call a graph that uses rectangular bars to show how many items are in each category? (1 mark)

4. 4. If a symbol of an apple in a pictogram represents 2 apples, how many apples are shown by 5 symbols? A) 7 B) 10* C) 5 D) 2 (1 mark)

5. 5. True or False: A bar chart does not need a title or labels on the axes. (1 mark)

6. 6. In a shop, Pip sold 10 books on Monday, 15 on Tuesday, and 10 on Wednesday. How many books were sold in total? (1 mark)

7. 7. Zara is looking at a bar chart where the y-axis goes up in steps of 5. What is this called? A) The scale* B) The tally C) The total D) The frequency (1 mark)

8. 8. True or False: You can find the 'difference' between two amounts by using subtraction. (1 mark)

9. 9. A table shows that 25 children like football and 15 children like tennis. How many more children like football than tennis? (1 mark)

10. 10. Max bought 3 bananas for £1.20 each. What is the total cost? A) £2.40 B) £3.00 C) £3.60* D) £4.00 (1 mark)

Draw: Draw a simple bar chart showing how many pieces of fruit your friends like: 4 apples, 6 bananas, and 2 pears. Remember to label your axes!



Extension challenge: Imagine you are doing a survey in class. Write down three questions you could ask your classmates to collect data, and explain how you would record their answers.