

Max's Magnificent Maths Statistics Challenge

Learning objective: To calculate the mean, identify the range, and interpret different types of statistical charts and graphs.

Help Max the monkey solve his jungle puzzles! Read each question carefully and select the correct answer or provide the requested value. Work out your calculations on a piece of paper first.

Answer Key: 1) C (14), 2) True, 3) 12, 4) B (The difference between the highest and lowest value), 5) False, 6) 6, 7) A (£4.50), 8) Mode, 9) True, 10) 25. Explanation for Q7: $(4+3+5+6+2)/5 = 20/5 = £4.00$ is incorrect; $(4+3+5+6+4)/5 = 22/5 = £4.40$. Wait, calculation: $4+3+5+6+2 = 20$. $20/5 = 4$. Wait, the set is 4, 3, 5, 6, 2. Sum is 20. Mean is 4. Correction: Answer A is £4.00.

Word bank: Mean · Range · Median · Mode · Frequency · Data · Average · Scale

1. 1. Max collected these numbers of bananas over five days: 10, 12, 15, 18, 15. What is the mean number of bananas? A) 12 B) 13 C) 14* D) 15 (1 mark)

2. 2. True or False: The range is calculated by subtracting the smallest value from the largest value in a set of data. (1 mark)

3. 3. In a set of data (5, 8, 12, 12, 15, 20), what is the mode? (1 mark)

4. 4. Which of these best describes the 'range'? A) The middle number B) The difference between the highest and lowest value* C) The total of all numbers D) The most frequent number (1 mark)

5. 5. True or False: If a bar chart has a scale going up in 2s, you cannot have a bar that represents the number 7. (1 mark)

6. 6. Max has a data set: 2, 4, 6, 8, 10. What is the median? (1 mark)

7. 7. Ellie the elephant spent £4, £3, £5, £6, and £2 on snacks this week. What was the mean amount spent? A) £4.00* B) £4.50 C) £5.00 D) £3.50 (1 mark)

8. 8. Which term describes the value that appears most often in a data set? (1 mark)

9. 9. True or False: A pie chart shows data as parts of a whole (100% or 360 degrees). (1 mark)

10. 10. If the mean of four numbers is 20, what is the total sum of those four numbers? (1 mark)

Draw: Draw a simple bar chart showing how many books Pip the caterpillar read this week: Monday (4), Tuesday (2), Wednesday (5), Thursday (3). Remember to label your axes!



Extension challenge: Imagine you are tracking the temperature in the jungle for one week. Write down a set of seven temperatures and challenge a friend to find the mean, median, and range of your data set.