

Max the Monkey's Maths Adventure: Mastering Factors and Multiples

Learning objective: To identify, find, and explain factors and multiples of numbers up to 100, including recognising prime numbers.

Help Max the Monkey organise his jungle store! Use your knowledge of times tables and division to solve these maths puzzles. Read each section carefully and show your working out to earn your points.

Word bank: Factor · Multiple · Product · Prime Number · Composite Number · Divisible · Remainder

1. Max has 24 bananas to share. List all the factor pairs of 24 that Max can use to arrange his fruit into equal rows. (3 marks)

2. Max is counting his climbing ropes. List the first five multiples of 7. How can you prove these are multiples of 7? (2 marks)

3. Max found a secret number between 10 and 20. It is a prime number. Which number could it be, and how do you know it is prime? (3 marks)

4. If Max has 36 coconuts, is 8 a factor of 36? Explain your reasoning using division or multiplication facts. (2 marks)

5. Create your own challenge: Pick a number under 50. Write down three of its multiples and two of its factors. Ask a partner to guess your number. (2 marks)

Extension challenge: Challenge: If you multiply two prime numbers together, is the result always an odd number? Investigate this using examples and explain what you discover.