

Max's Factor and Multiple Masterclass

Learning objective: To identify, describe and extend number sequences, and to find factor pairs for numbers up to 100.

Help Max the monkey solve his jungle puzzles! Use this fact-file to demonstrate your understanding of how numbers work. Remember: a factor is a number that divides into another exactly, and a multiple is the result of multiplying a number by an integer.

Word bank: factor · multiple · product · integer · divisible · sequence · pair

1. Defining Factors: Explain what a 'factor' is in your own words. Choose the number 12 and list all of its factor pairs. (3 marks)

2. Multiple Mania: Choose a starting number between 2 and 9. Write down the first six multiples of that number to create a sequence. (2 marks)

3. Max's Market Math: If a bag of monkey nuts costs £4, write a list of prices for 1, 2, 5, and 10 bags. How do these totals relate to multiples? (3 marks)

4. The Factor Hunt: Find all the factors of the number 24. How many pairs can you find that multiply together to make 24? (3 marks)

5. Spot the Pattern: Look at the numbers 15, 20, 25, 30. What is the rule for this sequence? Is 45 a multiple in this sequence? Explain why. (3 marks)

Extension challenge: Challenge: Find a number that has more than four factors. Can you draw a factor rainbow to connect the pairs?