

Max's Factor and Multiple Mission

Learning objective: To identify, describe and represent factors and multiples, including finding all factor pairs of a number, and common factors of two numbers.

Max the monkey is organising his fruit collection. Use your knowledge of times tables and division to help him solve these maths puzzles. Show your working out clearly.

Word bank: Factor · Multiple · Product · Prime · Divisible · Common

1. Max has 24 bananas to share into equal piles. List all the factor pairs of 24. (2 marks)

2. Find the first five multiples of 7. Are any of these multiples also multiples of 3? Explain how you know. (3 marks)

3. Max finds two piles of nuts. One pile has 12 nuts and the other has 18 nuts. What are the common factors of 12 and 18? (2 marks)

4. A number is a multiple of 5 and is also a factor of 40. The number is between 6 and 15. What is the number? (2 marks)

5. If Max buys 4 bags of apples at £3 each, is the total cost a multiple of 2, 3, 4, or all of these? Show your working. (3 marks)

Draw: Draw a basket of 12 apples and a basket of 16 pears. Use circles or lines to show how you can group the fruit into equal piles to demonstrate their factors.



Extension challenge: Challenge: Think of a number between 50 and 100 that has more than 6 factors. Write down the number and list all of its factors.