

Year 5 Maths Assessment: Factors and Multiples

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

Read each question carefully. Show your working out where possible. You may use the word bank to help you with mathematical terms. Good luck!

Max the monkey is organising his collection of tropical fruit for a jungle feast. He has 24 bananas, 18 mangoes, and 12 papayas. He wants to arrange them into equal groups so that none are left over.

Word bank: Factor · Multiple · Product · Common factor · Prime number · Composite number

1. Max has 24 bananas. List all the factor pairs of 24. (3 marks)

2. Is 7 a factor of 24? Explain your reasoning. (2 marks)

3. Find all the common factors of 18 and 12. (3 marks)

4. Write down the first five multiples of 6. (2 marks)

5. Max says, 'I have 18 mangoes. If I put them in groups of 4, I will have no mangoes left over.' Is Max correct? Use your knowledge of multiples to explain why. (3 marks)

6. Max buys some special star-fruit. He says the price is a multiple of 5 and a multiple of 2. It is also less than £20 but more than £10. How much could the fruit cost? Give two possible answers. (4 marks)

7. Explain the difference between a factor and a multiple in your own words. Use an example number to help illustrate your answer. (5 marks)

Draw: Draw a set of 12 apples arranged in an array that shows two different factor pairs (e.g., 3 rows of 4 and 2 rows of 6).



Extension challenge: Total: /25