Max’s Prime Number Maze

Learning objective: To identify, define, and apply knowledge of prime numbers up to 100.

Max the monkey is trying to find the path through the jungle. To get to the Golden Banana, he can only step on 'Prime Number' stones. A prime number is a number greater than 1 that has exactly two factors: 1 and itself. Use your knowledge to identify the prime numbers in the grid below and write them in the correct sequence to lead Max home.

Word bank: Prime number · Factor · Composite number · Multiple · Divisible

1. Max is standing on the number 7. He sees the numbers 8, 9, 11, and 15 nearby. Which one should he jump on next? Explain why it is a prime number. (2 marks)

2. True or False: The number 2 is a prime number. Explain your reasoning using the definition of a factor. (2 marks)

3. Max finds a stone labelled 21. Is this a prime number? If not, list the factors of 21 to prove it is a composite number. (2 marks)

4. List all the prime numbers between 20 and 40. (2 marks)

5. Max buys 3 packs of fruit for £2.00 each. The total cost is £6.00. Is the total cost a prime number? Why or why not? (2 marks)

Draw: Draw a jungle path consisting of 10 stepping stones. Write a different number on each stone (a mix of prime and composite numbers). Colour the stones that are prime numbers green and the composite numbers brown.

Extension challenge: Challenge: Investigate 'Twin Primes' (prime numbers that have a difference of 2, like 3 and 5). Can you find three pairs of twin primes greater than 40?