Max’s Magnificent Division Challenge

Learning objective: To solve long division problems with up to four-digit numbers by two-digit numbers using the formal written method.

Max the monkey is organising a fruit festival! Use your knowledge of long division to help him solve these problems. Show your working out clearly for every question.

Word bank: dividend · divisor · quotient · remainder · long division · calculate

1. Max has 1,248 mangoes to pack into crates. Each crate holds 24 mangoes. How many crates will Max need to pack all the mangoes? (2 marks)

2. Calculate 2,856 ÷ 14. Show your formal written method. (2 marks)

3. At the market, a bulk order of 3,450 pineapples is delivered. If they are shared equally into 25 baskets, how many pineapples will be in each basket? (2 marks)

4. Max finds 4,896 golden tokens. He shares them equally between 32 forest friends. How many tokens does each friend receive? (2 marks)

5. A shipment of 5,670 bananas arrives. If 18 bananas are packed in each bag, how many full bags can be made? Will there be any bananas left over? (3 marks)

Draw: Draw a picture of Max the monkey standing next to a giant pile of fruit, sorting them into neat wooden crates.

Extension challenge: Max has 2,500 coins to spend on decorations. If each decoration costs £12, how many full decorations can he buy? How much money will he have left over? Express your final answer as a remainder and then as a fraction of the cost of one decoration.