Max’s Mathematical Market Challenge

Learning objective: To solve long division problems with up to four-digit numbers by two-digit numbers.

Max the monkey is helping the local market stall owners sort their stock. Use your long division skills to help him calculate the totals. Remember to show your working out clearly, including any remainders.

Max is visiting the market to help the stallholders pack their goods into boxes. He knows that division is just a way of grouping items fairly. At the fruit stall, the farmer has 2,496 apples that need to be packed into boxes of 12. At the toy stall, a shopkeeper has 1,575 wooden building blocks to be shared equally among 25 gift bags. Finally, at the stationery stall, there are 3,456 pencils that need to be divided into packs of 16. Max is ready with his notepad to ensure everything is sorted perfectly!

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

1. If the farmer packs 2,496 apples into boxes of 12, how many full boxes will he have? (2 marks)

2. The shopkeeper shares 1,575 wooden building blocks into 25 gift bags. How many blocks go into each bag? (2 marks)

3. Calculate 3,456 divided by 16 to find out how many packs of pencils the stationery stall can create. (2 marks)

4. A customer buys a bulk order of 1,288 marbles. If they are sold in bags of 23, how many bags does the customer receive? (2 marks)

5. Max finds a crate of 2,150 stickers. If he puts them into envelopes of 35, how many stickers are left over as a remainder? (3 marks)

Draw: Draw Max the monkey standing next to a stack of boxes, holding a large clipboard with a division equation written on it.

Extension challenge: Max finds a box containing £4,896. If he wants to share this money equally between 18 local charities, how much will each charity receive? Write your answer in pounds (£).