

Max's Market Stall Challenge

Learning objective: To develop fluency and reasoning skills in division, including remainders and multi-step word problems.

Help Max the monkey organise his market stall. Read each problem carefully, show your working out, and remember to include the units (£ or items) in your final answer.

Max is preparing for the Great Forest Market. He has 146 shiny acorns to sell in small bags. Each bag must hold exactly 6 acorns. Any acorns left over will be given to the squirrels as a snack. Max also has a collection of handmade bookmarks. He wants to sell 5 bookmarks for £12.50, but he needs to work out the price of one single bookmark to help his customers.

Word bank: quotient · remainder · dividend · divisor · partition · strategy

1. How many full bags of acorns can Max fill? Explain how you found your answer. (2 marks)

2. How many acorns will the squirrels receive as a snack? (1 marks)

3. If Max wants to sell 128 stickers in packs of 8, how many packs will he have in total? Show your calculation. (2 marks)

4. Max has £45.50 to spend on new ribbons. If each metre of ribbon costs £5, how many full metres can he buy? How much change will he have left? (3 marks)

5. Justify your answer: Is it better to partition 146 into 120 and 26 before dividing by 6? Why or why not? (3 marks)

6. Compare and contrast the process of dividing by 6 with the process of dividing by 8. What patterns do you notice in the remainders? (3 marks)

Draw: Draw a visual representation of Max's acorn bags, showing the groups of 6 and the remaining acorns for the squirrels.



Extension challenge: Max decides to change his pricing. He wants to earn exactly £100 from selling 8 identical wooden toys. Calculate the price of one toy. If he sold them for £12 each instead, how much more money would he make in total? Write a brief explanation of how division helped you solve this.

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