

Max's Market Maths: The Art of Rounding

Learning objective: To round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.

Help Max the monkey organise the market stall prices. Use your knowledge of place value to round the numbers correctly. Remember to look at the digit to the right of the place you are rounding to; if it is 5 or more, round up!

Max is helping at the community market. He has a list of items for sale, but the prices are very precise, which makes them hard for customers to remember! Max wants to round these figures to make them easier to calculate. For example, a bag of organic apples costs £4,827. Max knows that to round this to the nearest hundred, he must look at the tens digit (2). Because 2 is less than 5, he rounds down to £4,800. A giant bag of sunflower seeds costs £12,560. To round this to the nearest thousand, he looks at the hundreds digit (5). Since it is 5, he rounds up to £13,000. Precision is important, but rounding helps us make quick mental calculations during a busy day at the market.

Word bank: Place value · Estimate · Round · Interval · Digit · Significant

1. Max has a crate of honey jars priced at £2,473. Round this price to the nearest 10 and the nearest 100. Show your working out. (2 marks)

2. A rare book at the stall is valued at £45,892. Round this value to the nearest 1,000 and the nearest 10,000. Explain why the value changes significantly when rounding to the nearest 10,000. (3 marks)

3. The total sales for the morning reached £184,395. Round this figure to the nearest 100,000. Justify your answer by identifying which digit determined the direction of your rounding. (2 marks)

4. Compare and contrast rounding the number 55,555 to the nearest 1,000 versus rounding it to the nearest 10,000. Which result is further from the original number? (3 marks)

5. What might happen if a shopkeeper rounded prices down to the nearest pound every time they sold an item? Explain the impact on the total daily profit. (2 marks)

Draw: Draw a number line from 4,800 to 4,900. Mark the position of £4,827 on your number line and use an arrow to show which 'round' value it is closer to.



Extension challenge: Imagine you are Max. Create a challenge for your classmates involving a price tag of £99,999. Ask them to round it to the nearest 10, 100, 1,000, 10,000 and 100,000. Write a brief reflection on why rounding a number like 99,999 to the nearest 100,000 produces such a large change.