

Year 6 Maths Assessment: Mastering Rounding

Learning objective: To demonstrate the ability to round any whole number to a required degree of accuracy and round decimals with up to three decimal places to the nearest whole number or one or two decimal places.

Read each question carefully. Show your working out where possible to gain method marks. Ensure you use the correct notation for currency where applicable.

Max the monkey is busy organising his collection of jungle treasures. He has been weighing his nuts, counting his shiny pebbles, and recording the prices of items at the local woodland market to help his friends with their budget planning.

Word bank: round · decimal place · nearest · significant · estimate · accuracy · increment

1. Max has 4,782 shiny pebbles. Round this number to the nearest 10, 100, and 1,000. (3 marks)

2. At the market, a bunch of bananas costs £3.47. Round this price to the nearest pound (£). Explain your reasoning. (2 marks)

3. Finn the dolphin measured the depth of a coral shelf at 12.568 metres. Round this measurement to: a) the nearest whole number, b) one decimal place, c) two decimal places. (3 marks)

4. Kit the fox is writing a computer programme. He needs to round the number 89,996 to the nearest 10. What is the result? (2 marks)

5. Nova the owl observed a star that is 452,391 miles away. Round this number to the nearest 10,000. Show your working. (3 marks)

6. Ellie the elephant bought a heavy book for £24.99 and a notepad for £8.45. Estimate the total cost by rounding each item to the nearest pound before adding them together. Then, calculate the actual difference between your estimate and the exact total. (4 marks)

7. Zara the zebra is creating a pattern using tiles. She has a total of 12,450 tiles. She says, 'If I round this to the nearest 1,000, I have 12,000 tiles.' Is she correct? Write a short explanation to prove or disprove her statement using your knowledge of rounding rules. (3 marks)

8. Write a short guide (approx. 100 words) for a younger student explaining the 'Five Rule' for rounding. Use an example involving money to illustrate how you decide whether to round up or down. (5 marks)

Draw: Draw a number line between 20 and 30. Mark the number 24.6 and show with an arrow which whole number it rounds to.

Extension challenge: Total: /25