

Year 6 Maths Assessment: Mastering Decimals

Learning objective: To identify, compare, order, and calculate with decimals to three decimal places, and solve problems involving money and measures.

Read each question carefully. Show your working out in the space provided to ensure you can gain method marks. Remember to include units like £ or kg where appropriate.

Max the monkey is helping the BookFlik group organise their shared supplies. He has recorded the weights of various items in kilograms (kg) and the prices of materials in pounds (£).

Word bank: decimal point · thousandths · place value · equivalent · rounding · ascending

1. Max finds a bag of sunflower seeds weighing 1.452 kg. Write this weight in words. (1 mark)

2. Order these weights from lightest to heaviest: 2.05 kg, 2.501 kg, 2.005 kg, 2.5 kg. (2 marks)

3. Rounding challenge: Round 14.783 to the nearest whole number, the nearest tenth, and the nearest hundredth. (3 marks)

4. Max buys three notebooks for £2.45 each and a pack of pens for £4.10. Calculate the total cost. How much change does he get from a £20 note? (4 marks)

5. Ellie the elephant has a collection of historical coins. If one coin weighs 0.125 grams, what is the total weight of 8 coins? Give your answer in grams. (3 marks)

6. Fill in the missing numbers to make these statements true: $0.6 = \frac{?}{10} = \frac{?}{100}$ and $0.075 = \frac{?}{1000}$. (2 marks)

7. Compare these decimals using $<$, $>$, or $=$: (a) 0.505 ____ 0.55 (b) 1.201 ____ 1.21 (c) 3.400 ____ 3.4 . (3 marks)

8. Max is planning a fruit salad. He buys 0.75 kg of strawberries, 1.2 kg of apples, and 0.455 kg of blueberries. Explain, using a calculation, whether he has bought more or less than 2.5 kg of fruit in total. Show your full working out. (5 marks)

Draw: Draw a number line between 0 and 1, marking the positions of 0.25, 0.5, and 0.75 clearly.

Extension challenge: Total: /25. Challenge: If Max divides a £15.50 budget equally between 5 friends, how much does each friend receive?