

Max's Fraction Adventure: A Maths Investigation

Learning objective: To consolidate understanding of fractions, including simplifying, comparing, and adding/subtracting fractions with different denominators.

Help Max the monkey solve his fraction puzzles! Use this template to record your findings as you work through your maths set. Read each prompt carefully and show your working out in the space provided. Remember to find common denominators where necessary and ensure your final answers are simplified.

Word bank: numerator · denominator · equivalent · simplify · common denominator · mixed number · improper fraction · part-whole

1. The Fruit Share: Max has $\frac{3}{4}$ of a basket of bananas and $\frac{2}{5}$ of a basket of oranges. Write down the method you will use to find the total amount of fruit Max has and calculate the sum. (3 marks)

2. Simplifying Challenge: Max found a bag containing $\frac{12}{18}$ of a bunch of grapes. Explain the steps to simplify this fraction to its lowest terms. (2 marks)

3. Comparing Quantities: Max has $\frac{5}{8}$ of a bag of monkey nuts and Kit has $\frac{3}{4}$ of a bag. Which animal has more nuts? Use your knowledge of equivalent fractions to explain your reasoning. (3 marks)

4. Converting Fractions: Max has an improper fraction of $\frac{17}{5}$. Convert this into a mixed number and draw a quick diagram to represent the whole numbers and the remaining part. (2 marks)

5. The Decimal Link: If Max spends £3.50 on fruit, and that represents $\frac{7}{10}$ of his pocket money, how much money does he have in total? Show your calculation. (3 marks)

Extension challenge: Create your own fraction word problem for a partner to solve. Use at least two different denominators and ensure the answer requires simplification.