



3 Years

7 Years

11 Years

16 Years

Mathematical Foundations



- 1) Share things out between people by counting in 1's
- 2) Use the term as 100% as meaning all of it

- 3) Double and halve numbers
- 4) Use 100%, 50% and 25% to talk about how much of something is left (eg a cake)

Test your Understanding

- 1) a) Share out these 10 buttons between me and you so it is fair. How much do we have each?
b) Share out these 12 buttons between 4 people
- 2) "Have you eaten 100% of your dinner?" "Are you 100% sure that is the right answer?"
- 3) What is double 12? What is half of 16?
- 4) What percentage of the cake do you think is left in each of these pictures?
 - a) Happy Birthday
 - b) Happy B
 - c) Hap

Key Skills and Concepts

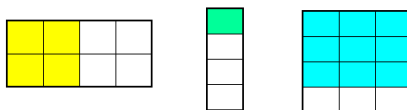


- 1) Use 25%, 50%, 75% and 100% to label shaded diagrams
- 2) Start to estimate proportions using percentages

- 3) Find 50%, 25% and 75% of amounts
- 4) Find 10%, 20%, 30%... of amounts
- 5) Convert common percentages into decimals and fractions
- 6) Use percentages in everyday conversation trying to incorporate probability

Test your Understanding

- 1) What % of each diagram is shaded?



- 2) What % of your head is covered in hair?
- 3/4) Find: a) 50% of 28 b) 25% of 32 c) 75% of 84
d) 10% of 30 e) 10% of 24 f) 20% of 90 g) 40% of 17
- 4) a) simplify b) Express as a mixed number
- 5) Write as fractions & decimals: 50%, 25%, 75%, 10%
- 6) What would you say the chance of it raining tomorrow is?

Optimise GCSE Performance



- 1) Answer questions involving percentage increase and decrease
- 2) Find percentages of any amount using a calculator

- 3) Use your calculator to convert fractions to percentages
- 4) Calculate percentage change or profit
- 5) Answer problems involving compound interest
- 6) Solve reverse percentage style problems

Test your Understanding

- 1) A bag normally costs £48 but is in a sale where everything is reduced by 20%. What is the sale price?
- 2) Find: a) 23% of £380 b) 83% of £4860 c) 7% of £540
- 3) Ali got 26 out of 30 in a test. What percentage did he get?
- 4) I bought some calculators for £280 and sold them all for a total of £345. What was my percentage profit?
- 5) Jasmine invests £2000 for 2 years at a compound interest rate of 2.8% per year. How much money does she have after 2 years of investment?
- 6) In 5 years an antique clock has gone up in value by 20%. It is now worth £480. How much was it worth 5 years ago?