Addition and Subtraction: Key Skill 9



Solve word problems and record the strategy used



For **word problems**, children read a story about a problem (often a real-life problem!), and then figure out what operations are needed to reach the answer.

To record the **strategy used**, children show their working or talk about how they got their answer.



Word problems are important because children must be able to choose and apply a strategy, estimate, solve it and check their answer. Most children will have difficulties in understanding what they need to do. Ask them to read the question carefully and decide what the most important information is and what operation they need to solve the question.



Try the strategy **CUBES** when working with word problems.

- **C** Circle the numbers
- **U** Underline the guestion
- **B** Box the keywords
- E Eliminate information not needed
- **S** Solve by showing your working out

Newman's Analysis is another strategy to help with word problems.

- 1 **Read** the question to me.
- 2 Tell me what the question is asking you to do.
- 3 Tell me **how** you are going to find the answer.
- 4 **Show** me what to do to get the answer.
- 5 Now, write down your answer.

Isaac had \$42. He was then given \$156 and found another \$345. How much money does Isaac have now? Answer: \$42 + \$156 + \$345 = \$543 Isaac now has \$543.

Annabel had 670 sheep. He sold 256. How many sheep are left? Answer: 670 – 256 = 414 Annabel had 414 sheep left.



WEB LINKS go to:

Video: Math word problems, easier

Video: Math word problems, harder

Video: Newmans explained

Multiplication and Division: Key Skill 10



Use and record a range of mental and written strategies to multiply by 1-digit and 2-digit operators



Children use **mental strategies** to figure out the maths problem in their head, without writing anything down.

Using a **written strategy** means to show your way of working something out using known relationships, patterns and operations.

Operators are the numbers that you multiply by. For example in 345 x 6, the operator is 6.



There are lots of mental strategies that children can use for division and multiplication. Encourage your child to become familiar with a range of different strategies. Look for your child developing strategies that suit them best, and to communicate how they used that strategy. Examples include doubling, halving and estimation. Written strategies include area and distributive multiplication.



To find 45 x 3, children might:

- estimate $(50 \times 3 = 150)$, so the answer will be around 150)
- use the skip count strategy (45 + 45 + 45 = 135)
- use the split strategy $(40 \times 3 + 5 \times 3 = 120 + 15 = 135)$
- use doubling (45 doubled is 90) 90 + 45 = 135
- use the area model $(40 \times 3) + (5 \times 3) = 120 + 15 = 135$
- use the distributive method $(3 \times 40) + (3 \times 5) = 120 + 15 = 135$



WEB LINKS go to:

Video: Mental strategies

Video: Chinese multiplication

Video: Lattice multiplication

Video: Area multiplication

Video: Distributive property

Video: Written strategies for multiplication

Games: Multiplication and division games