Problem solving – worded problems

ESSENTIAL VOCABULARY

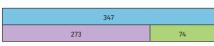|	
Add/plus/sum/ altogether	The method of combining the total of two or more numbers.
Subtract/differe nce/less	The method of taking a value away from a number.
Total	The answer/finished sum.
Column addition	Formal method to solve addition questions.
Column subtraction	Formal method to solve subtraction questions.
Exchange	Regrouping means to exchange 10 of a particular place value column for 1 of the next place value column along.
Estimate	Round numbers to nearest 10, 100 or 1000 to suggest a reasonable answer.
Inverse operation	Addition and subtraction can be used as inverse operations to solve missing number questions.

Useful Diagrams

Stem Sentences

What information does the problem tell us?
What does the whole bar represent?
I know I have… on this side… and … on this side. What will I need to do to find out how many missing parts it is equal to?

Checking answers

347	
273	74

347 – 74 = 273 can be checked using

273 + 74 = 347

This part whole shows the inverse calculations using these three numbers.

154 + 269 = 423	269 + 154 = 423
423 – 154 = 269	423 – 269 = 154

423
154   269

LINKS TO PREVIOUS LEARNING

- Continuing to build on part whole understanding.
  - Putting previous learning into context.
  - Using bar models from KS1.
- Gradual build up from lower numbers to higher numbers.
- Building on confidence with manipulatives and how to use these to create worded problems.

Key Themes

- Problem solving
- Number problems
- Number facts
- Place value
- Addition
- Subtraction