Problem solving – worded problems

ESSENTIAL VOCABULARY
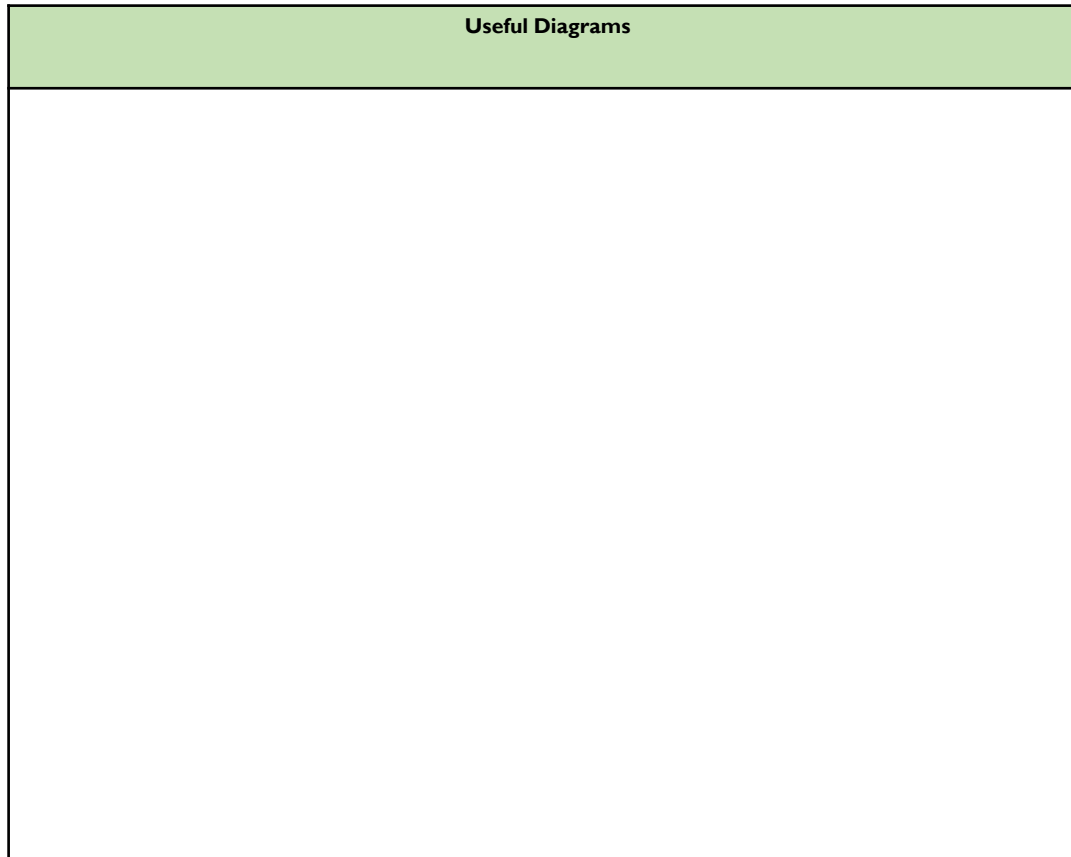
Add/plus/sum/ altogether	The method of combining the total of two or more numbers.
Subtract/difference/less	The method of taking a value away from a number.
Total	The answer/finished sum.
Column addition	Formal method to solve addition questions.
Column subtraction	Formal method to solve subtraction 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

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.
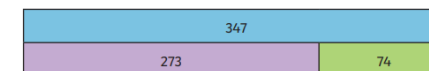- Building on confidence with manipulatives and how to use these to create worded problems.

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?

Key Themes

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

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