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KS2 Addition and Subtraction Teacher's Notes

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Introduction to Mult-e-Maths teacher's notes

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Introduction

All activities in the Mult-e-Maths Strand CD-ROMs are accompanied by teacher's notes, which are included on the CD-ROMS as PDFs. This pre-printed pack is designed to save you printing time, providing a ready-to-use resource that you can file in a ring-binder alongside your maths planning.

The pack consists of four parts, one for each of Years 3, 4, 5 and 6. In each part there are:

- a list of contents, including the titles of the on-screen activities and brief descriptions of them;
- a planning grid linking activities to objectives in the National Numeracy Strategy *Framework for teaching mathematics* (see below for further details);
- teacher's notes for starters and then lessons (see overleaf for further details).

Planning

The **planning grids** included in this pack are designed to help you to incorporate the Mult-e-Maths Strands into your planning.

The left-hand column of each grid shows NNS *Framework* objectives for the appropriate strand and year. They appear in the same order as in the *Framework*.

The right-hand column shows the starter and lesson activities that match each objective. (Lessons are shaded to enable you to distinguish between starters and lessons more easily.)

Note: The grids show the main learning objective for each activity, whereas the teacher's notes also detail any linked objectives.

The Mult-e-Maths Strands do not cover all of the NNS *Framework* objectives, but are designed to support other methods of effective teaching, including practical and pencil and paper work.

Medium term plans can be downloaded from the Mult-e-Maths website. These show how each Mult-e-Maths Strand activity can be mapped into your termly planning. They are provided in Microsoft Word ® format to enable you to adapt them to your own school plans.

Clicking on the Mult-e-Maths icon on any screen of a Mult-e-Maths Strand will take you directly to the website at:



www.cambridge-hitachi.com/multemaths/

The medium term plans can be accessed from the 'Ideas and inspiration' section.

Year 3 Framework objectives (continued)	Mult-e-Maths Starters and Lessons (continued)
(p33) Add by partitioning into tens and units, then recombining	AS336 Partitioning Finding the answers to additions where partitioning into tens and units might be a useful strategy
	AS3S13 Using tens and units Adding pairs of 2-digit numbers by partitioning into tens and units
	AS3L3 Partitioning and addition Partitioning numbers into tens and units to help with addition
	AS3L16 Adding larger numbers Adding larger numbers by splitting them into their place value parts and with the aid of jottings
(p33) Find a small difference by counting up from the smaller to	AS3S12 Counting up Solving subtractions by counting up
the larger number	AS3L9 Small differences Using counting up from the smaller number to solve subtractions and deciding when this method is most appropriate
	AS3L10 Changing the order Finding the missing number in addition problems by changing the order of the numbers
(p33) Identify near doubles, using doubles already known	AS3S21 Near doubles Using known doubles to solve near doubles
	AS3L12 Near doubles Using near doubles when adding
(p35) Add and subtract mentally a 'near multiple of	AS3S19 Adding and adjusting Adding 9, 19, 29,99 to 2-digit numbers
10' to or from a 2-digit number by adding or subtracting 10, 20, 30 and	AS3S20 Subtracting and adjusting Subtracting 9, 19, 29,99 from 2-digit numbers
adjusting	AS3L8 Using near multiples of 10 Adding and subtracting mentally using near multiples of 10 and adjusting
(p35) Use patterns of similar calculations	AS3S8 Using patterns Spotting inconsistencies in patterns of calculations and using the patterns to find the answers to other calculations
	AS3L14 Similar calculations Identifying patterns of similar calculations and using them to solve other additions and subtractions
(p35) Say or write a subtraction statement corresponding to a	AS3S3 Matching additions and subtractions Using knowledge of number facts to 20 to make additions and matching subtractions
given addition statement, and vice versa	AS3L6 Number facts to 20 Finding pairs of numbers with a given total up to 20 and identifying corresponding subtraction facts
(pp37, 39) Use known number facts and place value to	AS3S22 Add and subtract mentally Adding and subtracting mentally without crossing the tens boundary
add/subtract mentally	AS3S24 Using known number facts Finding the missing numbers in additions and subtractions and using one number fact to solve other additions and subtractions
	AS3L18 Number facts and place value

Planning grid for Addition and Subtraction Year 3

Year 3 sample plan: Autumn term, part 1

Read and write whole number up to 1000. Addisubtract 1, 10 and 100 tofform any whole number. Count onback in 100 and 100 tofform any whole number. Recall addition and subtraction facts for each number to at least 10. Recall addition and subtraction facts for each number to at least 10.					uning, mental strategies, rapid recall of +, -, x and + Racis). Denie doubleo of whole murative to 15, and corresponding halves. Recall multiplication tacts for 2 times-table, and derive division facts. Recall multiplication tacts for 2 times-table, and derive division facts. Recall multiplication tacts for 2 times-table, and derive division facts.			
Unit	Days	Pages	Topic	Objecti	ves: chödren will be taught to	Mult-e-Maths starter reference	Mult-e-Math lesson reference	
1 3		8-19	Place value, ordering, estimating, rounding	Read and figures an Know wha 3-digit nun multiple of	write whole numbers to 1000 in d words. It each digit represents, and partition hers into a multiple of 100, a 10, and ones.	N5354 N53512	NS3L2 NS3L3	
				estimation Estimate s	pegin to write the vocabulary of p to 100 objects.	N5353 N5351	NS3L1	
		76-77	Reading numbers from scales	Read scal	es to the nearest division.	553513		
2-3	10	24-29	Understanding + and -	Extend un addition a Read and Use +, - a Recognise	derstanding of the operations of subtraction. begin to write related vocabulary. ind = signs. It hat addition can be done in any			
		66-60	Money and 'real life' problems	Recognise notation (r Find totals pay.	e all coins and notes. Understand £.p. (g. £3.06). , give change and work out how to		AS3L15, SP3L6	
		32-41	Mental calculation strategies (+ and -)	Put the lar Identify ne Bridge thr	ger number first to count on. ar doubles. ough a multiple of 10 and adjust.	AS3511 AS3521 AS3517, AS3518, AS3523	AS3L13 AS3L12 AS3L7	
		58-01	Making decisions, checking results	Choose an calculation Explain an Check sur	opropriate number operations and methods to solve word problems, id record methods informally, ms by adding in different order.		SP3L1	
		13	Place value, ordering, estimating, rounding	Say the nu less, than	umber that is 1, 10 or 100 more, or any given 2- or 3-digit number.	NS352. NS3511	N\$3L4	
-4	13	70-77	Measures, including problems	Read time Read and to length. Use a rule nearest to Read scal Use decim Measure a Know the and m. Suggest s estimate o Record to match (to	to 5 minutes. begin to write the vocabulary related to draw and measure lines to the eff cm. sets the nearest division. will include the mand cm. ind compare using m and cm. km uitable units and equipment to measure lengths, licebulog lan.	55359	553L7	
		80-89	Shape and space	Choose at calculation Explain an Classify at referring to sides/edg	on porting a sprophate number operation and a method to solve word problems. Id record methods informally. Ind describe 2-0 and 2-0 shapes, or reflective symmetry, faces, es, vertices, angles. begint to write the vocabulary of	\$\$3\$1, \$\$3\$3 \$\$3\$3	\$\$3L2	
				position. Use space Identify rig	es on square grids.	\$\$355	0000	
		62-65	Reasoning about shapes	Investigate	nt. e general statements about shapes.			

Sample medium term plans for Year 3

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Introduction to Mult-e-Maths teacher's notes

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Objective:

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Teacher's notes

Each strand except Solving Problems consists of separate starters and lessons to enable you to mix and match starter and lesson activities appropriate to your planning. (The starters for Solving Problems are incorporated within the lessons, because each starter is designed to revise specific maths skills needed in the problem-solving lesson activity.) All of the activities are accompanied by teacher's notes.

The teacher's notes for starters include the following sections:

- Objective(s) from the NNS Framework •
- Prior knowledge and skills to help you to plan when it is appropriate to incorporate this activity into your teaching
- Vocabulary
- Resources
- Main teaching activity to give a suggested order of teaching, plus notes on using the Mult-e-Maths activity
- **Probing questions**

In addition to these sections, teacher's notes for lessons may also include some or all of the following:

- Differentiated pupil activities •
- Plenarv
- Key idea and assessment to suggest a focus for what to assess during the plenary
- Solutions to pupil activities •

For ease of reference, each activity and its accompanying teacher's notes are coded, for example:

- FD6S17 means Year 6 Starter 17 of the Fractions, Decimals, Percentages, Ratio and Proportion Strand.
- AS3L7 means Year 3 Lesson 7 of the Addition and Subtraction Strand.

The codes for the six Mult-e-Maths Strands are:

- FD Fractions, Decimals, Percentages, Ratio and Proportion
- NS Numbers and the Number System
- Addition and Subtraction AS
- Multiplication and Division MD
- SS Measures, Shape, Space and Handling Data
- SP Solving Problems

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Plenary

Use with board page 3 to model some of the proble the Resource sheet. © How did you rearrange the number s? Why?

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Key idea and assessment

Changing the order can help when adding

simplify an add iten by rearranging the order of he numbers ?

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Solutions
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A1 7 2 9 8 4 4 11 6 5 6 5 7 3 8 16 9 14 10 26 B125 2 29 8 24 4 31 6 30 6 57

Personal notes

Repeal with other Nos of numbers that can lain pairs that make 10 or 20, pairs that inside 9 or 11, pairs that are nee doubles ... Of ours how changing the order to use tuseful pairs can be very helpful when adding numbers.

Sample teacher's notes for AS3L10

Year 3 Contents

Planning grid

AS351 Multiples of 5 and 'a bit' Expressing 2-digit numbers as multiples of 5 and 'a bit' AS352 Missing numbers Using addition and subtraction facts for numbers to 20 to complete missing number calculations AS353 Matching additions and subtractions AS354 Total 100 Using a dollition and subtractions AS355 Making 19 Identifying pairs of numbers with a total of 19 and subtracting numbers to 10 from 19 AS355 Partitioning Finding the answers to additions where partitioning into tens and units might be a useful strategy AS358 Partitioning Finding the answers to additions where partitioning into tens and units might be a useful strategy AS358 Using patterns Spotting inconsistencies in patterns of calculations and using them to solve subtractions from 1000 Adding several numbers Using patterns Spotting inconsistencies in patterns of calculations and using the patterns to find the answers to other calculations Adding several numbers Adding four numbers using a range of mental addition strategies Adding four number is using a range of mental addition strategies Adding pairs of J-digit number to a 1-digit number Adding pairs of 2-digit number to 20	Starters						
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AS3S19 Adding and adjusting Adding 9, 19, 29,99 to 2-digit numbers AS3S20 Subtracting and adjusting Subtracting 9, 19, 29,99 from 2-digit numbers AS3S21 Near doubles Using known doubles to solve pear doubles	AS3S18	Counting on through multiples of 10 Adding 1-digit numbers to 2-digit numbers by bridging through multiples of 10					
AS3S20 Subtracting and adjusting Subtracting 9, 19, 29,99 from 2-digit numbers AS3S21 Near doubles Using known doubles to solve pear doubles	AS3S19	Adding and adjusting Adding 9, 19, 29,99 to 2-digit numbers					
AS3S21 Near doubles Using known doubles to solve near doubles	AS3S20	Subtracting and adjusting Subtracting 9, 19, 29,99 from 2-digit numbers					
	AS3S21	Near doubles Using known doubles to solve near doubles					

Addition and Subtraction Year 3 Contents

Starters (continued)

AS3S22	Add and subtract mentally
	Adding and subtracting mentally without crossing the tens boundary
AS3S23	Crossing the tens boundary
	Adding and subtracting pairs of 2-digit numbers mentally crossing the tens boundary
AS3S24	Using known number facts
	Finding the missing numbers in additions and subtractions and using one number fact to solve other additions and subtractions

AS3L1	Adding multiples of 5 and 'a bit' Splitting numbers into a multiple of 5 and 'a bit' to make addition easier
AS3L2	Using inverse operations
AS3L3	Partitioning and addition
AS3L4	Multiples of 100 that total 1000
AS3L5	Addition facts to 20
AS3L6	Number facts to 20 Finding pairs of numbers with a given total up to 20 and identifying corresponding subtraction facts
AS3L7	Bridging through 10 Adding and subtracting single digits to or from 2-digit numbers by bridging through multiples of 10
AS3L8	Using near multiples of 10 Adding and subtracting mentally using near multiples of 10 and adjusting
AS3L9	Small differences Using counting up from the smaller number to solve subtractions and deciding when this method is most appropriate
AS3L10	Changing the order Finding the missing number in addition problems by changing the order of the numbers
AS3L11	Making 100 from multiples of 5 Finding pairs of multiples of 5 that total 100
AS3L12	Near doubles Using near doubles when adding
AS3L13	Counting on from the larger number Adding by putting the larger number first and counting on
AS3L14	Similar calculations
AS3L15	Calculating with money Adding and subtracting in the context of money
AS3L16	Adding larger numbers Adding larger numbers by splitting them into their place value parts and with the aid of jottings
AS3L17	Finding larger differences Using informal written methods to support the strategy of counting on to find larger differences
AS3L18	Number facts and place value Using known number facts and place value to help mental calculation
AS3L19	Adding in columns Developing use of column addition for TU + TU and HTU + TU
AS3L20	Changing use of column subtraction for TU – TU

Year 4 Contents

Planning grid

Starters

AS4S1	Finding differences
	Finding small differences by counting up through multiples of 10, 100 or 1000
AS4S2	Steps of 10 and 100
	Adding and subtracting multiples of 10 and 100 to/from a number with up to 4 digits
AS4S3	Partitioning and addition Using partitioning to help with the addition of pairs of 2-digit numbers
AS4S4	Near doubles
	Identifying near doubles and using doubles to find their totals
AS4S5	Multiples of 10, 100 and 1000
	Adding and subtracting multiples of 10, 100 and 1000 to/from 4-digit numbers
AS4S6	Related number facts
	Using understanding of addition and subtraction and the relationship between them to give related number facts
AS4S7	Adding strings of numbers
	Adding three or four numbers by finding pairs that total a multiple of 10
AS4S8	Finding pairs
	Adding several single-digit numbers by first finding pairs totalling 9, 10 or 11
AS4S9	Column subtraction
	Identifying missing numbers in column subtractions involving HIU – IU
AS4S10	Different totals
	Using numbers from a given set to create as many different totals as possible
A54511	Make 100 Finding how many need to be added to a given number to make 100
AG4612	Make 1000
A34312	Finding how many need to be added to a given multiple of 50 to make 1000
AS4S13	Missing number subtractions
704010	Finding missing numbers in subtractions where a 1-digit number is subtracted from a 2-digit number
AS4S14	Using number facts
	Practising and using addition and subtraction facts to 20
AS4S15	Adding several multiples of 10
	Using a range of mental strategies to add several 2-digit multiples of 10
AS4S16	Two-digit pairs
	Choosing and using appropriate mental methods to add and subtract pairs of 2-digit numbers
AS4S17	Missing number additions
	Finding missing numbers in additions where a pair of 2-digit numbers are being added
AS4S18	Column addition of money amounts Identifying missing money amounts in column additions

Addition and Subtraction Year 4 Contents

AS4L1	Counting the difference
AC41.2	
A34L2	Counting in repeated steps of 10 and 100 to solve additions and subtractions
AS4L3	Adding tens first Partitioning 2-digit numbers and adding the tens first
AS4I 4	Near doubles
	Using doubles to find near doubles
AS4L5	Using multiples of ten
	Adding and subtracting mentally using multiples of 10 and adjustment
AS4L6	Related number facts
	Using one number fact to find related number facts
AS4L7	Adding small numbers
	Adding several numbers using mental strategies
AS4L8	Adding larger numbers
	Refining strategies for mental addition
AS4L9	Rapid recall
	Consolidating knowledge of number facts to 20 and using them to find answers to other calculations
AS4L10	Place value and known facts
	Using known number facts and place value to solve problems involving larger numbers
AS4L11	Missing numbers
AS4L12	Written methods for addition
AS4L13	Written methods for subtraction
A34L14	

Year 5 Contents

Planning grid

Starters

48581	Addition bingo
A0001	Using appropriate addition strategies with 1-digit and 2-digit numbers
AS5S2	Subtraction bingo
	Using appropriate subtraction strategies with 1-digit and 2-digit numbers
AS5S3	Complements
	Finding what number added to a given number gives a total of 100 or 1000
AS5S4	Shopping problems
	Using addition and subtraction strategies with money
AS5S5	Time differences
	Finding differences between times
AS5S6	Total cost
	Adding money amounts
AS5S7	Finding differences
	Subtracting one number from another, where both numbers are in the range 0 to 120
AS5S8	Missing addition digits
	Finding the missing digits in additions involving 3-digit numbers
AS5S9	Missing subtraction digits
	Finding the missing digits in subtractions involving 3-digit numbers

AS5L1	Adding consecutive numbers
	Choosing and using different strategies for adding several consecutive numbers
AS5L2	Temperature differences
	Finding differences between pairs of temperatures, including negative temperatures
AS5L3	Mental addition strategies
	Choosing and using different mental strategies to add pairs of 3-digit numbers where at least one is a multiple of 10
AS5L4	3- and 4-digit differences
	Making subtractions using pairs of 3-digit numbers, then 4-digit numbers, and solving them using a written method
AS5L5	Adding and subtracting decimals
	Adding and subtracting pairs of decimal numbers each with units and tenths
AS5L6	How many more to make?
	Finding pairs of numbers that total a multiple of 100
AS5L7	Decimal doubles
	Finding doubles and near doubles of 2-digit decimals with one decimal place

Year 6 Contents

Planning grid

Starters

AS6S1	Adding multiples of 100
	Adding pairs of 4-digit multiples of 100
AS6S2	Adding decimals
	Working mentally to find missing decimals in addition sentences
AS6S3	Complements to 10 000 and 100 000
	Finding pairs of multiples of 100 to make 10 000 and pairs of multiples of 1000 to make 100 000
AS6S4	Complements to 1
	Finding pairs of decimal fractions with two decimal places to make 1
AS6S5	Finding differences
	Calculating rises and falls between pairs of temperatures, that include at least one negative temperature
AS6S6	Adding and subtracting measures
	Using addition and subtraction to solve problems related to capacity
AS6S7	Differences in measures
	Finding differences between pairs of lengths written in decimal notation
AS6S8	Estimating money amounts
	Rounding and estimating amounts of money
AS6S9	Calculating mentally
	Using a range of mental calculation strategies to solve problems

AS6L1	Multiples of 100 and 1000
	Adding and subtracting pairs of 4-digit multiples of 100 and pairs of near multiples of 1000
AS6L2	Adding several numbers
	Choosing an efficient strategy for adding several whole numbers or several decimals with one decimal place
AS6L3	Approximating, then adjusting
	Practising adding and subtracting the nearest multiple of 10, 100 or 1000 and adjusting by 1 and applying the method to decimals with one decimal place
AS6L4	Calculating with decimals
	Using a range of strategies to calculate with decimals
AS6L5	Written addition
	Refining the written method of column addition and deciding when to use it
AS6L6	Written subtraction
	Refining the written method of column subtraction and deciding when to use it
AS6L7	Adding and subtracting decimals
	Relating written and mental methods of adding and subtracting whole numbers to decimals

Mult-e-Maths and the National Numeracy Strategy Framework

Addition and Subtraction Year 3

Planning grid

Year 3 Framework objectives	Mult-e-Maths Starters and Lessons
(pp25, 29) Extend understanding of the operations of addition and subtraction, read and begin to write the related vocabulary, and continue to recognise that addition can be done in any order. Use the +, – and = signs	AS3L15 Calculating with money Adding and subtracting in the context of money
(pp25, 29) Extend understanding that subtraction is the inverse of addition	AS3S16 What's my number? Identifying a 2-digit number given the total when a number is added to it and the difference when a number is subtracted from it
	AS3L2 Using inverse operations Using subtraction to find the missing numbers in addition problems
(p31) Know by heart all addition and subtraction facts for each number to 20	AS3S2 Missing numbers Using addition and subtraction facts for numbers to 20 to complete missing number calculations
	AS3S5 Making 19 Identifying pairs of numbers with a total of 19 and subtracting numbers to 10 from 19
	AS3S14 Addition facts to 20 Adding pairs of numbers with totals up to 20
	AS3S15 Subtraction facts to 20 Subtracting from numbers up to 20
	AS3L5 Addition facts to 20 Investigating addition facts for numbers to 20
(p31) Know by heart all pairs of multiples of 100 with a total of 1000	AS3S7 Total 1000 Identifying pairs of multiples of 100 with a total of 1000 and using them to solve subtractions from 1000
	AS3L4 Multiples of 100 that total 1000 Finding and using pairs of multiples of 100 that total 1000
(p31) Derive quickly all pairs of multiples of 5 with a total of 100	AS3S4 Total 100 Using a 100 square to identify pairs of multiples of 5 that total 100
	AS3L11 Making 100 from multiples of 5 Finding pairs of multiples of 5 that total 100
(p33) Add by putting the larger number first and counting on	AS3S11 Larger number first Adding a 2-digit number to a 1-digit number
	AS3L13 Counting on from the larger number Adding by putting the larger number first and counting on
(p33) Add three or four small numbers by putting the largest number first and/or by finding pairs totalling 9, 10 or 11	AS3S9 Adding several numbers Using pairs of numbers that total 9, 10 or 11 to make mental addition more efficient
	AS3S10 Different addition strategies Adding four numbers using a range of mental addition strategies
(p33) Partition into '5 and a bit' when adding 6, 7, 8 or 9	AS3S1 Multiples of 5 and 'a bit' Expressing 2-digit numbers as multiples of 5 and 'a bit'
	AS3L1 Adding multiples of 5 and 'a bit' Splitting numbers into a multiple of 5 and 'a bit' to make addition easier

Mult-e-Maths and the National Numeracy Strategy Framework – Addition and Subtraction Year 3 Planning grid

Year 3 Framework objectives (continued)	Mult-e-Maths Starters and Lessons (continued)
(p33) Add by partitioning into tens and units, then recombining	AS3S6 Partitioning Finding the answers to additions where partitioning into tens and units might be a useful strategy
	AS3S13 Using tens and units Adding pairs of 2-digit numbers by partitioning into tens and units
	AS3L3 Partitioning and addition Partitioning numbers into tens and units to help with addition
	AS3L16 Adding larger numbers Adding larger numbers by splitting them into their place value parts and with the aid of jottings
(p33) Find a small difference by counting up from the smaller to the larger number	AS3S12 Counting up Solving subtractions by counting up
	AS3L9 Small differences Using counting up from the smaller number to solve subtractions and deciding when this method is most appropriate
	AS3L10 Changing the order Finding the missing number in addition problems by changing the order of the numbers
(p33) Identify near doubles, using doubles already known	AS3S21 Near doubles Using known doubles to solve near doubles
	AS3L12 Near doubles Using near doubles when adding
(p35) Add and subtract mentally a 'near multiple of 10' to or from a 2-digit number by adding or subtracting 10, 20, 30 and adjusting	AS3S19 Adding and adjusting Adding 9, 19, 29,99 to 2-digit numbers
	AS3S20 Subtracting and adjusting Subtracting 9, 19, 29,99 from 2-digit numbers
	AS3L8 Using near multiples of 10 Adding and subtracting mentally using near multiples of 10 and adjusting
(p35) Use patterns of similar calculations	AS3S8 Using patterns Spotting inconsistencies in patterns of calculations and using the patterns to find the answers to other calculations
	AS3L14 Similar calculations Identifying patterns of similar calculations and using them to solve other additions and subtractions
(p35) Say or write a subtraction statement corresponding to a given addition statement, and vice versa	AS3S3 Matching additions and subtractions Using knowledge of number facts to 20 to make additions and matching subtractions
	AS3L6 Number facts to 20 Finding pairs of numbers with a given total up to 20 and identifying corresponding subtraction facts
(pp37, 39) Use known number facts and place value to add/subtract mentally	AS3S22 Add and subtract mentally Adding and subtracting mentally without crossing the tens boundary
	AS3S24 Using known number facts Finding the missing numbers in additions and subtractions and using one number fact to solve other additions and subtractions
	AS3L18 Number facts and place value Using known number facts and place value to help mental calculation

Mult-e-Maths and the National Numeracy Strategy Framework – Addition and Subtraction Year 3 Planning grid

Year 3 Framework objectives (continued)	Mult-e-Maths Starters and Lessons (continued)
(p41) Bridge through a multiple of 10, then adjust	AS3S17 Counting back through multiples of 10 Subtracting 1-digit numbers from 2-digit numbers by bridging through multiples of 10
	AS3S18 Counting on through multiples of 10 Adding 1-digit numbers to 2-digit numbers by bridging through multiples of 10
	AS3S23 Crossing the tens boundary Adding and subtracting pairs of 2-digit numbers mentally crossing the tens boundary
	AS3L7 Bridging through 10 Adding and subtracting single digits to or from 2-digit numbers by bridging through multiples of 10
(pp43, 45) Use informal pencil and paper methods to support, record or explain HTU \pm TU, HTU \pm HTU	AS3L17 Finding larger differences Using informal written methods to support the strategy of counting on to find larger differences
(pp43, 45) Begin to use column addition and subtraction for HTU \pm TU where the calculation cannot easily be done	AS3L19 Adding in columns Developing use of column addition for TU + TU and HTU + TU
	AS3L20 Changing a ten Developing use of column subtraction for TU – TU

Key to lesson and starter references

AS3S1 refers to Addition and Subtraction Year 3 Starter 1

AS3L1 refers to Addition and Subtraction Year 3 Lesson 1