

## On the Boil

## Year 2: Pupils need to continuously use mathematical language alongside manipulation of objects to understand the key concepts in Year 2.

	Autumn	Spring	Summer	Key resources and representations
Counting	Counting forwards and backwards in steps of 1, 2, 5 and 10 from 0, and in steps of 10 from numbers other than 10	Counting forwards and backwards in steps of 1, 2, 3, 5 and 10 from 0, and in steps of 10 from numbers other than 10	Counting forwards and backwards in steps of 1, 2, 3, 5 and 10 from 0, and in steps of 10 from numbers other than 10	Counting sticks, 1p, 2p, 5p and 10p coins and money box/pot Numicon 1,2,5,10 shapes Numicon or straws bundled into tens for counting on in tens from numbers other than 10. ITPs – counting, counting on and back, numbergrid,
Counting			Count in halves to and back from	numberline, beadsticks, KS1 order numbers  Objects that can be halved, counting stick
Number and place value	Partitioning, combining and re- combining numbers to 20 in many different ways	Partitioning, combining and re- combining numbers beyond 20 in many different ways	zero.  Partitioning, combining and recombining numbers beyond 20 in many different ways eg 17 = 5 + 5 + 5 + 5	Numicon Cuisenaire Coins
Number and place value	Positioning two-digit numbers on a numberline relative to multiples of 10	Positioning two-digit numbers on a numberline relative to multiples of 10	Positioning two-digit numbers on a numberline relative to multiples of 10, identifying nearest multiple of ten (rounding)	Numbered, partly numbered and blank numberlines
Number and place value	Make two-digit numbers using un- structured and structured apparatus	Make two-digit numbers using un- structured and structured apparatus	Make two-digit numbers using un- structured and structured apparatus	Multi-link, counters Numicon Coins, Straws bundled into tens Dienes
Number and place value	Make two-digit numbers using place value cards and write using numerals, saying the value of each digit in a two-digit number	Make two-digit numbers using place value cards and write using numerals, saying the value of each digit in a two-digit number	Make two-digit numbers using place value cards and write using numerals and words, saying the value of each digit in a two-digit number	Arrow cards Place value charts Numicon, 10 and 1 p coins, straws, dienes,
Addition and subtraction	Recalling addition and subtraction facts to 10 and 20	Recalling addition and subtraction facts within 20, interpreting missing number questions with = symbol in any position	Recalling addition and subtraction facts within 20, represented as missing number problems with = symbol in any position	Numicon, Cuisenaire Double sided counters, tens frames, balance pans, fingers
Addition and subtraction	Addition and subtraction of single- digit numbers, including crossing 10 by counting on/back	Addition and subtraction of teens numbers and single digit numbers by counting on/back from the largest number.	Addition and subtraction of two digit and single digit numbers by reordering ie. Putting largest number first/looking for bonds.	Bead strings, Numicon, Cuisenaire, number lines, dienes,
Addition and subtraction	Add three single digit numbers by reordering le. 1 + 3 + 9 – putting the largest number 1st or finding bonds.	Add several single digit numbers by red doubles/bonds	ordering ie. 3 + 3 + 8 + 2 = using	Numicon, dice, cuisenaire,
Addition and subtraction	Doubling and halving numbers – rapid recall up to 6 + 6	Doubling and halving numbers – rapid recall up to 10 + 10	Doubling and halving numbers – rapid recall up to 20 + 20	Fingers, numicon, Cuisenaire, multilink, tens frames, double bead bars
Multiplication and division	Rapid recall of multiplication and related division facts – 2s and 10s link to arrays and jumps along a number line	Rapid recall of multiplication and related division facts – 2s, 5s and 10s link to arrays and jumps along a number line	Rapid recall of multiplication and related division facts – 2s, 5s and 10s link to arrays and jumps along a number line	2p and 10p coins, Numicon, fingers, money pots ITP counting (arrays)
Measurement	Reading the time to the hour and half hour	Reading the time to the hour, half hour, quarter past and quarter to	Reading the time to five minutes	Clocks with geared hands, circular counting bars, 5p coins, ITPs