

Year 2			
Number and Place Value			
Vocabulary: 2-digit; base 10; pattern; sequence; Numbers to one hundred, Hundreds Partition, recombine, Hundred more/less (place value, digit, integer, symbol, compare, equal to, more, less, greater, fewer, partition)			
Autumn 4-week block			
Step		NC links	Notes:
1	Count objects to 100 by making groups of 10	Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward	Ensure counting is covered in Basic Knowledge.
2	Recognise tens and ones	Identify, represent and estimate numbers using different representations, including the number line Recognise the place value of each digit in a 2-digit number (tens, ones)	
3	Partition numbers to 100		
4	Flexibly partition numbers		
5	Write numbers to 100 in words	Read and write numbers to at least 100 in numerals and in words	
6	10s and 1s on the number line to 100	Recognise the place value of each digit in a 2-digit number (tens, ones)	
7	Estimate numbers on a number line	Identify, represent and estimate numbers using different representations, including the number line	
8	Compare objects and numbers	Compare and order numbers from 0 up to 100; use and = signs	This is two steps on WRM – resources available from both
9	Order objects and numbers		
10	Application	Use place value and number facts to solve problems	
Year 2			
Addition and subtraction			
Vocabulary: Bar model; operation, inverse operation; column; exchange; bridge; method (part, whole, commutative, sum, total, subtract, add, equals, difference)			
Autumn 5-week block			
Step		NC links	Notes:
1	Fact families – addition and subtraction bonds within 20	Represent and use number bonds and related subtraction facts within 20 (Y1)	This should also come into Basic Knowledge Sessions – to ensure pupils develop automaticity
2	Related facts – bonds to 100	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	As above (this is two steps on WRM)
3	Add and subtract 1s	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s, a 2-digit number and 10s, two 2-digit numbers and adding three 1-digit numbers	*Including adding three 1-digit numbers
4	Add by making 10		
5	Add to the next 10 and across 10		
6	Subtract across a 10 and from a 10		This is two steps on WRM – break down the steps if needed.
7	Subtract a 1-digit number from a 2-digit number		This is two steps on WRM – break down the steps if needed.
8	Add and subtract 10s	Compare and order numbers from 0 up to 100; use and = signs	10 more and 10 less – covered in Basic Knowledge and counting.

# Year 2 Small Steps

9	Add two 2-digit numbers (not across 10)	solve problems with addition and subtraction: - using concrete objects and pictorial representations, including those involving numbers, quantities, and measures - applying their increasing knowledge of mental and written methods	
10	Add two 2-digit numbers (across a 10)		
11	Subtract two 2-digit numbers (not across 10)		
12	Subtract two 2-digit numbers (across 10)		
13	Compare number sentences		
14	Missing number problems	show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	
15	Application	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems	- including commutative

## Year 2

### Multiplication and Division

**Vocabulary:**  
 times-table; facts; multiples; repeated addition; lots of; of; multiply; multiplied by; times; commutative; twos, fives, tens, threes; array; go into; divide, divide between, division, dividing; grouping, sharing (*equal groups, array, row, column, sharing, sharing equally*).

#### Autumn 5-week block

Step	NC link	Notes:	
1	Recognise and make equal groups	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals ( $=$ ) signs  Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot  Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers  solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	
2	Add equal groups		
3	Introduce the multiplication symbol		
4	Multiplication sentences		
5	Use arrays		
6	Make equal groups – grouping		
7	Make equal groups -sharing		
8	Doubling and halving		Make links between multiplying by 2 and dividing by 2 from BK.
9	Odd and even numbers		
10	The 2, 5 and 10 times tables – Application		Multiple steps on WRM – ensure pupils are fluent in counting in 2s, 5s and 10s before giving them opportunities to apply them to problem solve.

Year 2			
Fractions			
Vocabulary: Two quarters, three quarters, one third, two thirds; unit fraction, numerator, denominator, vinculum; equivalence, equivalent ( <i>whole, parts, equal parts, half, halves</i> )			
Spring 4-week block			
Step		NC links	Notes:
1	Parts and wholes / equal and unequal parts	Recognise, find, name and write fractions $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity  Write simple fractions, for example $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	This is two steps on WRM – break down if needed.
2	Recognise and find a half		These steps are all broken down on WRM – fee free to break these down where needed or use resources from both steps for one lesson. There is time to explore these concepts in depth.
3	Recognise and find a quarter		
4	Recognise and find a third		
5	Find the whole		
6	Unit fractions		
7	Non-unit fractions		
8	Recognise the equivalence of a half and two-quarters		
9	Recognise and find three-quarters		
10	Count in fractions up to one whole		
11	Application		
Year 2			
Money			
Vocabulary: Value, coin, note, amount, total, change ( <i>value, pence, pound</i> )			
Spring 3-week block			
Step		NC link	Notes:
1	Count money – notes and coins	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value  find different combinations of coins that equal the same amounts of money  Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	There are many steps for this on WRM – break this step down into as many as is needed for your cohort.
2	Choose notes and coins to make amounts		These steps lend themselves to exploring practically– spend the time consolidating pupils understanding before formal SDI lessons.
3	Make the same amount (including making a pound)		
4	Compare amounts of money		
5	Calculate with money		
6	Find change		
7	Two-step problems		

## Year 2

### Time

**Vocabulary:**  
quarter past/to, 5 past, 10 past, twenty to etc, start, duration, end, interval, how long...? When did it start /end /finish...?, seconds; (hour, o'clock, half past, minute, second, watch hands).

#### Spring 3-week Block

Step		NC link	Notes:
1	O'clock and half past	Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clockface to show these times	This unit is given 3 weeks to ensure pupils have opportunities to secure their understanding of telling the time on clocks practically as well as completing SDI sessions. Do not rush pupils on before they are ready.
2	Quarter past and quarter to		
3	Tell the time past the hour		
4	Tell the time to the hour		
5	Tell the time to 5 minutes		
6	Minutes in an hour	Know the number of minutes in an hour and the number of hours in a day	
7	Hours in a day		
8	Application – including ordering and comparing	compare and sequence intervals of time	

## Year 2

### Position and direction

**Vocabulary:**  
Direction, forwards, backwards; right angle; rotation, Clockwise, anticlockwise. (turn, full turn, half turn, three quarter turn, position)

#### Spring 2-week block

Step		NC links	Notes:
1	Describe movement and position	Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise)  order and arrange combinations of mathematical objects in patterns and sequences	WRM – language of position and describe movement
2	Describe turns		
3	Describe movement and turns		
4	Shape patterns with turns		

## Year 2

### Shape

#### Vocabulary:

Pentagon, hexagon, octagon, quadrilateral; prism; vertices, vertex; rotate; Symmetry, symmetrical, line of symmetry; horizontal, vertical; Fold; pattern, repeating pattern (*polygon, 2D, 3D, corners, face, side, edge*).

#### Summer 3-week block

Step	NC links	Notes:
1	Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line  Compare and sort common 2-D and 3-D shapes and everyday objects  Identify 2-D shapes on the surface of 3-D shapes  Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	This is 1 step on WRM but may need splitting into 2D and 3D for your cohort.
2		2 steps on WRM – break down as needed.
3		
4		
5		
6		
7		This is multiple steps on WRM – pupils may need to explore these concepts physically before SDI
8		
9		

## Year 2

### Length and height

#### Vocabulary:

Distance, metres (*length, measure, ruler, cm*)

#### Summer 2-week block

Step	NC links	Notes:
1	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels  Compare and order lengths, mass, volume/capacity and record the results using $>$ , $<$ and $=$  Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures  Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	Ensure pupils explore this concept by measuring real life objects in addition to SDI.
2		
3		
4		
5		
6		

Year 2			
Mass, capacity and temperature			
Vocabulary: g/kg; ml/l; temperature, thermometer, degrees Celsius, increase, decrease, warmer, colder (mass, capacity, balance, scales, volume, full, half full, empty)			
Summer 3-week block			
Step		NC links	Notes:
1	Measure in grams	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels  Compare and order lengths, mass, volume/capacity and record the results using >, < and =	Ensure pupils explore this concept using scales, not just reading scales on sheets.
2	Measure in kilograms		
3	Compare mass		
4	Four operations with mass		
5	Measure in millilitres		
6	Measure in litres		
7	Compare volume and capacity		
8	Four operations with capacity		
9	Temperature		
10	Application		
Year 2			
Statistics			
Vocabulary: Count, tally, tally chart, table; data, represent, sort; pictogram, symbol; block diagram, axis; label, title, scale; most popular, most common, least popular, least common; Venn diagram, Carrol diagram			
Summer 2-week block			
Step		NC link	Notes:
1	Make Tally charts	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables  Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity  Ask and answer questions about totalling and comparing categorical data  Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	This step includes 1-1 and 2,5 and 10 from WRM – it is a good opportunity for pupils to collect data and to decide the appropriate key for their pictograms.
2	Tables		
3	Block diagrams		
4	Interpret pictograms (1-1)		
5	Interpret pictograms (2, 5 and 10)		
6	Draw pictograms		

## Year 2

### Basic Knowledge DELTA progression to MTC and beyond:

count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward  
recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even

non-stat

Pupils are introduced to the multiplication tables. They practise to become fluent in the 2, 5 and 10 multiplication tables and connect them to each other.  
Practice the 3 times tables

### DELTA SSA end points:

Place Value	Addition	Subtraction	Multiplication	Division	Fractions
$30 + \square + 3 = 53$	$38 + 42 = \square$	$64 - 15 = \square$	$4 \times 10 =$	$35 \div 5 =$	$\frac{1}{4}$ of 12 =

## Year 2

### Basic Knowledge and Basic Skills

Strand		NC links	Notes:
PV	Count in 2s, 5s and 10s	Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward	Ideally daily counting is needed.
PV	Count in 3s		
A&S	Bonds to 10, 20 and 100	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Pupils should be recalling bonds to 10 and 20 with automaticity by the end of the year and applying knowledge to bonds to 100.
A&S	Add three 1-digit numbers	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s, a 2-digit number and 10s, two 2-digit numbers and adding three 1-digit numbers	If needed, this can be added as an SDI lesson, if pupils need to explore using manipulatives.
M&D	The 2 times table	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	Daily counting needed to recall the facts with accuracy. This should be started in September to ensure some knowledge is attained before beginning the M&D unit in SDI lessons.
M&D	Divide by 2		
M&D	The 10 times table		
M&D	Divide by 10		
M&D	The 5 times table		
M&D	Divide by 5		