Week.	Mathematical aspect	Non-negotiable end	Non-negotiable end points	Curriculum statements – Year 3.	
1.	Number and place value: properties of place value,	Knows the properties of place value for three-digit numbers.	Knows the properties of place value for four-digit numbers.	 To recognise the place value of each digit in a three-digit number (hundreds, tens, ones). To compare and order numbers up to 1000. To read and write numbers up to 1000 in numerals and in words. 	 To recognise number (thousa To order and
Links to resources and	policy documents:	1	I	400 + 90 + 2	Arrange the given digit
Positional The 4 is worth 400 in 467 Additive 400 + 60 + 7	4 x 100 6 x 10 7 x 1 467 Base 10 Base 10 The 4 is Worth 4 hundreds in 467		n 3 6 1 9 3 x 1000 6 x 100 1 x 10 9 x 1 .	492 Four hundred and ninety two 500 + 40 + 7 547 Five hundred and forty seven 200 + 4 204 Two hundred and four	Bet 2, 9 TH
2.	Counting and estimating	Knows how to count in step sizes and estimate numbers up to 1000.	Knows the rules of rounding.	 To count from 0 in multiples of 4, 8, 50 and 100, finding 10 or 100 more or less than a given number. To identify, represent and estimate numbers using different representations 	 To identify, rerepresentations To round any To count in m To find 1000 r
Say ten more 20 21 22 23 44 25 26 27 28 29 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 32 53 44 55 49 57 58 39 40 61 42 43 0 51 52 54 54 54 54 54 54 54 54 54 54 54 54 54	Say 100 more 4 35 30 37 30 30 40 41 42 40 40 40 40 40 40 50 4 45 60 67 60 60 70 71 72 73 74 75 70 77 78 79 60 5 say one less		0 70 80 90 100 110	Continue the pattern 4, 8, 12, 16 8, 16, 32 0, 50, 100, 150 Complete the pattern 100 200 400 1000 31000 What numbers are represented by the arrows?	Say whether each n 600. 500 Round 535, 556 and Use the stem senter
3.	Addition and Subtraction: mental methods	Knows bonds to 20 and 100. Knows how to add/subtract multiples of 10, 100 from three- digit numbers.	Knows efficient methods for addition and subtraction up to and including four-digit numbers.	 To add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens a three-digit number and hundreds. To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	 To add and su efficient writter subtraction whe To solve addit contexts, decidi why.
Links to calculation pol Near doubles 13+14 = Double $13=26$ 26+1=27 or Double $14=28$ 28-1=27 Using known facts 40 + 80 = 120 using $4 + 8 = 12So, 400 + 800 = 1200Remodelling strategy243 + 198241 + 200 = 441$	Icy mental methods: 0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	100	Which digit changes and which stay the same? 543 + 1 543 - 1 543 + 10 543 - 10 543 + 100 543 - 100 376 + 4 695 + 8 376 + 20 695 + 30 376 + 400 695 + 600	Write <, > or = in e sentences correct 3,456 + 789 2,829 + 1,901 7,542 + 1,858 1,818 + 1,999



4.	Addition and Subtraction: Written methods 2 and 3 digit numbers, column methods.	Knows how to calculate with columnar methods.	Knows efficient methods for addition and subtraction up to and including four-digit numbers.	 To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. To estimate the answer to a calculation and use inverse operations to check answers. To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	 To add and su efficient writter subtraction whe To solve addir contexts, deciding why. To estimate a a calculation.
Links to resources and	policy documents:	1	1		Daniel buys a new
Columnar addition	Columnar subtraction			Show how to add and subtract these numbers	new mobile phone His friend, Paul, bu
625	Exchange from tens			with 324. 675 100 co	How much money
+ 48	6 14 1				Complete the missing p
_673	- <u>286</u> 468				
1					+2
Regroup the 10				What are the	τ <u>Ζ</u>
10 10 10 10 10 10 10 10 10 10 10 10 10 1		7 15		Which method? 53556	
492	4 7 9	2 4 11		$\frac{1}{600} - 200 + \frac{134}{134} - \frac{134}{134}$	What is the missing four d
+379	3 0	004		492 + 36 $691 - 429$????????????????????????????????????
1 3 1 1	<u> </u>	+ 9 8		452 250	+639
871	7 5 3	366			
ς	Multiplication and	Knows the 2 1- and 8-	Knows and annlies table	• To recall and use multiplication and division facts for the 3.4	• To recall mult
5.	division:	times tables and the	facts for recall of	and 8 multiplication tables.	12 × 12.
	Table facts	doubling patterns.	multiplication and division	• To write and calculate mathematical statements for	• To use place
	mental methods.	Knows how to multiply	facts for multiplication	multiplication and division using the multiplication tables that	divide mentally
		using partitioning.		numbers, using mental methods.	 To solve prob
					including using
					problems such
LINKS to resources and	policy documents:			3 x 4 x 2 = 24	
		ill in the multiplication and division table	es by working out the missing digits.	Jane did 3 x 4 then doubled for x2.	
X 2 4 8 X	8 2 4	× 89 ×	7 6	James did 4 x 2 = 8, then 8 x 3.	9×4×2 8×
5 8		12 24	20 16 14	Associativity Commutative law	
3 6		3 12 5	40	(2 x 3) x 4 = 2 x (3 x 4) 9 12 15 18 21	56
10 9		14	36	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
7 × 9 = 63		54 3	30		
9 × 7 =					
63 ÷ = 9					
÷ 9 = 7					



Medium Term Planning: Autumn term – Y3/4.

	6.	Multiplication and division: written methods partitioning and rearranging the dividend	Knows how to partition numbers when multiplying. Knows how to rearrange dividends into multiples of the divisor.	Knows how to multiply/divide two-digit and three-digit numbers by one-digit numbers using expanded or formal written methods of short multiplication and division.	 To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Explain the effect of multiplying by 10 and multiples of 10 To write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which <i>n</i> objects are connected to <i>m</i> objects. 	 To multiply tw number using for To solve probincluding using problems such a
L 22 22 2	Short multiple Grid method Short multiple $13 \times 8 =$ Expanded $20 \times 8 = 160$ $3 \times 8 = 24$ 23 $3 \times 8 = 24$ 23 23 $23 \times 8 = 184$ $\times \frac{8}{24}$ $24(8 \times 3)$ $\overline{X \ 20 \ 3}$ $160(8 \times 24)$ 184	policy documents: Miplication Rearranging the dividend to find multiples of the divisor. 48 + 3 = 1 "What do I know about the 3 x tables?" "I know 3 x 10 = 30 and 3 x 6 = 18." 48 + 3 = 16 492 + 4 = 7	4 5 3 x 6 I 8 (6 x 3) 3 0 0 (6 x 5 0 2 4 0 0 (6 x 4 0 2 7 1 8	$\begin{array}{c} 4 5 3 \\ x 6 \\ 2 7 1 8 \\ 3 1 \end{array}$	Using known facts If $3 \times 2 = 6$, then $30 \times 2 = 60$, $60 \div 3 = 20$ and $30 = 60 \div 2$. Partitioning Informal recording of partitioned numbers $15 \times 5 = 75$ $10 \times 5 = 50$ $5 \times 5 = 25$ 14×5 10×5 10×5	1. Work out the following calculations a) 67 × 5 c) 2 4 4 × 3
			Fight and to accircle of that \$6.0 pixs when reaches have and range it is 1. 123 4.492		Solve these equationsSolve these equations $75 \times 5 =$ $95 \div 5 =$ $36 \times 4 =$ $56 \div 4 =$ $22 \times 8 =$ $84 \div 2 =$	186 ÷ 6 = 6 no groups of 6 can be made
	7.	Geometry: properties of shape, 2D and 3D	Know the mathematical names and properties of 2d and 3d shapes including parallel and perpendicular lines.	Knows how to describe and classify shapes using mathematical properties.	 To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them with increasing accuracy. To identify horizontal, vertical, perpendicular and parallel lines in relation to other lines. 	 To compare a quadrilaterals a sizes. To identify lin different orient. To complete a specific line of s
	Links to resources and What is the name What is the name Is it a polygo Is it a regular Are there an Are there an What kind of sha Is it a regular Are there an What kind of sha Are there an Are there an What kind of sha Are there an Are there an Mare there an	policy documents: of the shape? pe is it and what are the properties of the shape? n? or irregular polygon? des of equal length and are all the angles equal? des are there? y parallel sides how many pairs of parallel sides? y right angles how many? s) Are there any obtuse or acute angles? y lines of symmetry how many?	90* Right angle	Parallel Perpendicular	ShapeNumber of sidesNumber of right anglesPairs of parallel linesSquare442Rectangle442Triangle310Pentagon500Hexagon600ShapeFacesEdgesVerticesCube6128Cube101Cylinder200	Try to draw a triangl So Has a right angle No right angle
	8.	Measurement: converting between units of measure	Knows the relationships between the units of measure for each aspect.	Knows how to multiply and divide to convert between units of measure.	• To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).	 To convert be kilometre to me To estimate, of including mone



Medium Term Planning: Autumn term – Y3/4.

Links to resou	urces and p	policy documents:			Use <, > or =	List in order, starting 5 km 5 km 400
1km 1m 1cm 1 kg 1 l	1000 m 100 cm 10 mm 1000g 1000m	A bag of sugar w would half the bag Three strips of card are tog One strip is 22 cm long. The next strip is 35 cm long 22 cm 35 cm How long is the last strip?	veighs 1.5kg. How much weigh in grams? rether 1 m long. ?	h	$250g = \frac{2}{4} \text{ of 1kg}$ $600\text{ml} = 1 \text{ litre}$ $743m = \frac{1}{2} \text{ of km}$ 200ml are $poured from$ $the jug.$ How much is $block = 600\text{ mm} + 2\text{ cm}$	The world best time for 23 seconds. How many seconds is Write in the mi 1.5 cm
9.		Measurement: Time 12-hour clock am/pm	Knows how to read the time to the nearest minute. Knows that the 12- hour clock can represent am or pm. Knows the passing of time can be calculated as time durations.	Knows how to read, write and convert time between analogue and digital 12- and 24-hour clocks.	 To tell and write the time from an analogue clock, includ using Roman numerals from I to XII, and 12-hour and 24-hoc clocks. To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seco minutes, hours and o'clock; use vocabulary such as am/pm morning, afternoon, noon and midnight. To know the number of seconds in a minute and the num of days in each month, year and leap year. To compare durations of events, for example to calculate the time taken by particular events or tasks 	1.5 km To read, write digital 12- and 2 • To solve proble minutes; minute hber
Or g g	One minute in Am and pm, m afternoon, noo	terval. on, midnight 12 0 0 0 0 0 0 0 0 0 0 0 0 0	12 1 2 1 10 12 1 2 9 3 4 9 7 5 5 Vclock Half past 1 10 pm 1:30 am 500 01:30	Ten past 2 10:10 pm 22:10	Draw these times on a clock face 26 minutes past one 14 minutes to seven 12 minutes past 9 $\int \int $	c) c) c) c) c) c) c) c) c) c)
10.		Fractions: finding hundredths and families of common equivalents representing, comparing and ordering of unit fractions of shapes and numbers.	Knows that fractions are relative to the whole and can be represented in different ways	Knows how to connect hundredths to tenths and place value and decimal measure. Knows how to connect tables knowledge to families of common equivalents.	 To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. To compare and order unit fractions, and fractions with t same denominators. To solve problems that involve all of the above. 	 To count up a hundredths aris dividing tenths b To solve problecal calculate quanti including non-up number. To recognise a equivalent fract



$\begin{array}{c c} & 3\\ \hline $	$\frac{2}{3} = \frac{4}{6}$		en = ten ones	0 $\frac{1}{6}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{5}{6}$ 1 How many sixths equal $\frac{1}{s}, \frac{1}{z}$? How fractions from smallest to largest.	$\frac{1}{D} = \frac{D}{DD}$ $\frac{1}{D} = \frac{D}{DD}$ $\frac{1}{D} = \frac{D}{DD}$ $\frac{1}{D} = \frac{D}{DD}$
11.	Addition and subtraction: written methods including money in pounds and pence.	Knows how to calculate with columnar methods.	Knows how to add and subtract using standard written algorithms including in the context of money.	 To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction. To estimate the answer to a calculation and use inverse operations to check answers. To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. 	 To add and s the efficient w subtraction wh To solve add contexts, decid why.
Links to resources and $\pounds 3.22$ for the second se	policy documents: E3.22 £8.93 5.71 -£5.71 8.93 £3.22 Lining up the place value. £345.00 $+ f_1 62.98$ 407.98			Which is the correct notation? £567.54p £567.54 Dan buys two presents. How much change does he get from £10? Show your working.	Fill in the r 3197 + Jim has approx 91964 + 17540 ✓ the level of a Nearest 10 If we know 3,450 subtraction facts of You have £5.70 in yu another £6.40. How much money do
12.	Geometry: Position and direction	Knows how to describe position and movement using right angles for quarter turns.	Knows how to draw a pair of axes in one quadrant, with equal scales and integer labels. Knows how to read, write and use pairs of coordinates.	To describe position and movement using clockwise, anti- clockwise, left and right. (Last met in Y2) To describe position and movement using the correct terms.	 To describe p quadrant. To plot speci polygon.



Medium Term Planning: Autumn term – Y3/4.

