

Autumn 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	Counting Count from 0 in multiples 50 and 100. Review counting in 5s and 10s. Discuss how multiples of 5, 10, 50 and 100 end in 0 or 5. Use counting sticks, hundred square and/or gattegno charts.	PartitioningPartition numbers up to 1000 in as many different ways as possible. $56 = 50 + 6, 25 + 25 + 6, 50 + 3 + 3$ Progress to apply the above skill to 3 digit numbers.	Adding mentally Use number bonds to add mentally. 13 + 7 = ? 3+7 = 10 so 10 + 10 = 20 23 + 7 = 3 + 7 = 10, so 10 + 20 = 30 Progress to apply the above skill to 3 digit numbers.	Subtracting mentally Use number line to add on to subtract. Adding up to nearest tens. 87-25 = 2587 Progress to apply the above skill to 3 digit numbers.	Adjust to subtract mentally (-9 and -11 to start with). 37 - 9 = 28 (Adjust 9 by adding one to it to make 10, 37-10 = 27, then adjust the answer by adding 1, 27+1= 28) Apply the same with -11, but encourage children to partition 11 into 10 + 1, take 10 away first, then take 1 away. Progress to apply the above skill to 3 digit numbers.	Counting Count from 0 in multiples of 4. Review counting in multiples of 2 and discuss the links – double 2 is 4. All multiples of 2 and 4 are even. Use counting sticks and hundred squares.	ı investigations and puzzles. Use ssment as the children apply their
Maths Unit	Place Value Place value of numbers up to three digits. Read and write numbers up to 1000 in numerals and words.	Place Value Compare and order numbers to 1000. Find 10 or 100 more or less than a given number.	Addition Add and subtract numbers mentally, including: a three- digit number and ones, a three- digit number and tens, a three- digit number and hundreds	Subtraction Subtract numbers mentally , including: a digit number and tens, a three-digit num	2D Shape Identify right angles and recognise angles as a property of shape. Draw 2D shapes (use of dotted paper recommended).	gations/Assessment Week en taught this half term through source of application and asse knowledge.	
Reasoning/ Problem Solving	Identify , represent and estimate numbers using different representations.	Solve number problems and practical problems involving these ideas.	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. Estimate answer to a calculation and use the inverse operations to check answers.	Solve problems, including missing numl place value, and more complex addition Estimate answer to a calculation and us answers.	Describe the properties of 2-D shapes using accurate language. Identify angles greater or lesser than a right angle.	Investi to apply skills they have bee ations too, this is a valuable	
X tables	TTRS (x2,5,10 then 3,4,8) Counting sticks End of year target: recall multiplication and division facts for the 2, 5, 10, 3, 4 and 8 times tables.	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	Allow children NRICH investig

Autumn 2	Week 1	Week	2 W	Veek 3	Week 4	Week 5	Week 6	Week 7		
Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.										
Daily Assessment – use oral evidence from the children in lessons to update maths assessment ladders.										
Number a	nd Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	М	leasures		
Daily Assessment – use oral evidence from the children in lessons to update maths assessment ladders. Number and Place Value Multiplication and Division Addition and Subtraction Fractions/Decimals Geometry Statistics Measures										



	Use knowledge of near doubles	X 10 mentally.	Divide by 10	Use the inverse to divide.	Time		2D Shape
Basic Skills / Daily Mental Maths	to add mentally. 25 + 26 = 51 (26 can be partitioned into 25+1, so 25+25 = 50, 50+1=51) 150+152=302 (152 can be partitioned to 150 + 2, double 150 is 300, 300 + 2 = 302).	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c }\hline\hline \hline & $	48 divided by 8 = ? 8 x 8 = 48, so 48 divided by 8 = 8.	Read the time (digital) – 12 hour and 24 hour clock (opportunity to use mental addition/subtraction taught in Autumn 1)	sessment Week ve been taught this half term through I investigations too, this is a valuable s the children apply their knowledge.	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. Flash various 2D shapes to the children and they answer on whiteboards or verbally.
Maths Unit	Measures (Perimeter) Measure the perimeter of simple 2D shapes.	Multiplication Write and calculate mathematical statements for multiplication using the multiplication tables that they know (3, 4 and 8), including for TO x O, using mental strategies	Division Write and calculate mathematical stat multiplication tables that they know (3 using mental strategies.	ements for division using the 8, 4 and 8), including for TO x O,	Fractions <i>Recognise, find and write fractions of</i> <i>a discrete set of objects: unit fractions</i> <i>and non-unit fractions with small</i> <i>denominators.</i>	Investigations/A en to apply skills they ha s and puzzles. Use NRICI dication and assessment a	Fractions Recognise and use fractions as numbers: unit fractions and non- unit fractions with small denominators.
Reasoning/ Problem Solving	Perimeter Inverse - If I know the perimeter of a square is 12cm. What is the length of each side of the square?	Solve problems including missing number problems involving multiplication, including positive interger scaling problems and correspondence problems which n objects are linked to m objects.	Solve problems including missing num including positive interger scaling pro- which n objects are linked to m objects	nber problems involving division, blems and correspondence problems s.	Solve problems that involve all of the above.	Allow childr investigations source of app	Solve problems that involve all of the above.
X tables	TTRS (x2,5,10 then 3,4,8) Counting sticks End of year target: recall multiplication and division facts for the 2, 5, 10, 3, 4 and 8 times tables.	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		



	Counting	Multiples of 5.	Compensate to subtract	Review 'Adjusting to Subtract'	Recognising multiples of 4		Review multiplying
Basic Skills / Daily Mental Maths	Count from 0 in multiples of 8. Review counting in multiples of 2 and 4. Discuss the links – double 2 is 4, double 4 is 8. All multiples of 2, 4 and 8 are even. Use counting sticks and hundred squares.	Count up and down, back and forwards in multiples of 5. Identify that multiples of 5 end only in digits 0 and/or 5. Use counting sticks and hundred squares.	35 - 18 = ? Add two to 18 to make 20 (friendly number) 35 - 20 = 15 Then add 2 back on 15+2=17 Progress to apply the above skill to 3 digit numbers.	mentally (-9 and -11 to start with) from Autumn 1 and develop this skill to subtract by 12 and so on.	Multiples of 4 are even so always end with the digits 0, 2, 4, 6 or 8. To find the answer to a x4 calculation, double the number twice, $8x4 = \frac{8x2}{16} = 16, \frac{16x2}{16} = 32$	sh investigations and puzzles. Use essment as the children apply their	and dividing by 10 from Autumn 2 then move on to multiplying and dividing by 100.
Maths Unit	Measures (Length) Measure, compare lengths add and subtract lengths (cm, mm, m). Measure and compare lengths (cm, mm, m) in different contexts (including curved lines, measuring objects and children's bodies).	Addition Add numbers with up to three digits, using formal written methods of columnar addition.	Subtraction Subtract numbers with up to three digits, using formal written methods of columnar subtraction.		Measures (Money) Add and subtract amounts of money to give change, using both £ and p in practical contexts.	Investigations Week been taught this half term throug ble source of application and ass knowledge.	Statistics Interpret and present data using bar charts, pictograms and tables.
Reasoning/ Problem Solving	Solve worded problems applying all of the above.	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. Estimate answer to a calculation and use the inverse operations to check answers.	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.Estimate answer to a calculation and use the inverse operations to check answers.		Apply the above skills in worded problems. Become fluent in counting and recognising coins by adding and subtracting amounts, including mixed units, Read and say amounts of money confidently and use the symbols £ and p accurately, recording pounds and pence separately. Decimal recording of money is introduced formally in year 4.	to apply skills they have l gations too, this is a valuat	Solve one step and two step questions (for example, 'How many more? and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables.
X tables	TTRS (x2,5,10 then 3,4,8) Counting sticks End of year target: recall multiplication and division facts for the 2, 5, 10, 3, 4 and 8 times tables.	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	Allow children NRICH investig	TTRS (x2,5,10 then 3,4,8) Counting sticks

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Num	ber and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		



Basic Skills / Daily Mental Maths	Double numbers up to 1000. Double 15 10 + 5: double 10 is 20, double 5 is 10, so 10 +20 = 30. Progress to apply the above skill to 3 digit numbers.	Halving numbers/recall known factsPartition to halve.Half of $1000 = 500$ Half of $500 = 250$ Half of $300 = 150$ Half of $100 = 50$ Half of $50 = 25$	Dividing by 4. <i>Encourage children to halve the number and halve again when dividing by 4.</i>	Roman numerals (Leads on to Time in Summer 1). Recognise the value of I – XII	nent Week been taught this half term NRICH investigations too, d assessment as the children edge.
Maths Unit	Multiplication Revisit 'Write and calculate mathematical statements for multiplication using the multiplication tables that they know (3, 4 and 8), including for TO x 0, using mental methods from Autumn 2 and progress to formal written methods.	Division <i>Revisit 'Write and calculate mathematical statem</i> <i>that they know (3, 4 and 8), including for TO x O</i> <i>progress to formal written methods</i>	ents for division using the multiplication tables , using mental methods from Autumn 2 and	Fractions Add and subtract fractions with the same denominator within one whole $(5/7 + 1/7 = 6/7)$.	Investigations/Assessin to apply skills they have gations and puzzles. Use source of application an apply their knowl
Reasoning/ Problem Solving	Solve problems including missing number problems involving multiplication, including positive interger scaling problems and correspondence problems which n objects are linked to m objects.	Solve problems including missing number problems involving division, including positive interger scaling problems and correspondence problems which n objects are linked to m objects.		Continue to recognise fractions in the context of parts of a whole, numbers, measurements, a shape, and unit fractions as a division of a quantity. Practise adding and subtracting fractions with the same denominator through a variety of increasingly complex problems to improve fluency.	Allow childrer through investi this is a valuable
X tables	TTRS (x2,5,10 then 3,4,8) Counting sticks End of year target: recall multiplication and division facts for the 2, 5, 10, 3, 4 and 8 times tables.	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks

Summer 1 Week 1 Week 2 Week 3 Week 4 Week 5 Week	Veek 6
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Basic Skills / Daily Mental Maths	Recognising multiples of 3 Any time we multiply by 3 , the digits in the answer will always add up to a multiple of 3 . For example: $8x3 = 24$, the 2 and 4 add up to 6, which is a multiple of 3 .	Fractions Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. Link 5/10 with ½, discuss why they represent the same value. Model and count with counting sticks.	Review multiplying and dividing by 10 from Autumn 2 then move on to multiplying and dividing by 100.	Multiples of 8 To multiply by 8, you can double the number 3 times: $8x2 = 16$ 2x2 = 4, $4x2 = 8$, $8x2 = 16$	Time <i>Know the number of seconds in a minute,</i> <i>and the number of days in each month, year</i> <i>and leap year.</i>	ugh investigations and assessment as
Maths Unit	2D Shape – Turns Recognise angles as a property of a shape or a description of a turn. Recognise that two right angles make a half turn, three make three quarters of a turn and 4 right angles make a full turn.	Fractions Recognise and show, using diagrams, equivalent fractions with small denominators.	Measures (Volume/capacity) Measure, compare add and subtract volume/capacity (l/ml).	Measures (mass) Measure, compare add and subtract mass (kg/g)	Time Tell and write the time from an analogue clock, including using Roman numerals from I to XII.	stigations Week been taught this half term throu is is a valuable source of applic apply their knowledge.
Reasoning/ Problem Solving Opportunities	Identify whether an angle is greater than or less than a right angle. Describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.	Compare and order unit fractions, and fractions with the same denominators.	Use standard units of measurement with increasing accuracy, using their knowledge of the number system.	Use standard units of measurement with increasing accuracy, using their knowledge of the number system.	Compare durations of events (for example to calculate the time taken by particular events or tasks). Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight	Inve ren to apply skills they have truck investigations too, thi the children
X tables	TTRS (x2,5,10 then 3,4,8) Counting sticks End of year target: recall multiplication and division facts for the 2, 5, 10, 3, 4 and 8 times tables.	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	Allow childt puzzles. Use N

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Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	Geometry (3D shapes) Identify 2D shape faces on 3D shapes.	Review multiplying and dividing by 10 from Autumn 2 then move on to multiplying and dividing by 100.	Partition to multiply. 13 x 4 = Partition 13 into 10 and 3. Multiply 10 x 4 = 40 Multiply 3 by 4 = 12 So 40 + 12 = 52	Partition do divide. 56 divided by $4 =$ Partition 56 into 40 and 16 40 divided by $4 = 10$ 16 divided by $4 = 4$ So $10 + 4 = 14$	Revise mental maths skills taught this year in various contexts.	Week n taught this half term (CH investigations too, d assessment as the edge.	ed to revisit.
Maths Unit	Geometry (3D shapes) Make 3D shapes using modelling materials. Recognise 3D shapes in different orientations and describe them.	tions Review	try Review	ns Review	res Review	vvestigations /Assessment apply skills they have bee tions and puzzles. Use NR ele source of application an children apply their knowl	nits that the children ne
Reasoning/ Problem Solving Opportunities	Describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.	4 Calcula	Geome	Fractio	Measuı	In Allow children to through investigat this is a valuab	Week – Revise u
X tables	TTRS (x2,5,10 then 3,4,8) Counting sticks End of year target: recall multiplication and division facts for the 2, 5, 10, 3, 4 and 8 times tables.	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	TTRS (x2,5,10 then 3,4,8) Counting sticks	2 Day

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			



Autumn 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
	Counting	Counting	Partitioning	Adjust to subtract	Compensate to subtract	Number bonds to add	
Basic Skills / Daily Mental Maths	Count in multiples of 6. Review counting in 3s and discuss the relationship between 3 and 6, double 3 is 6. Explore using that knowledge to calculate, for example, if 1 know $4x^3 = 12$, I can double 12 to answer $4x^6=24$. Use counting sticks, hundred squares and/or gattegno charts to model counting in multiples of 6s.	Count in multiples of 7. Use counting sticks, hundred squares and/or gattegno charts to model counting in multiples of 7s.	Partition numbers up to four digits in as many different ways as possible. 56 = 50 + 6, 25 + 25 + 6, 50 + 3 + 3 Progress to apply the above skill to 3 and 4 digit numbers.	Use number line to add on to subtract. Adding up to nearest tens. 87-25 = 2587 Progress to apply the above skill to 4 digit numbers.	 35 - 18 = ? Add two to 18 to make 20 (friendly number) 35 - 20 = 15 Then add 2 back on 15+2=17 Progress to apply the above skill to 3 and 4 digit numbers. 	Use number bonds to add mentally. 13 + 7 = ? 3+7 = 10 so 10 + 10 = 20 23 + 7 = 3 + 7 = 10, so 10 + 20 = 30 Progress to apply the above skill to 3 digit number and 4 digit numbers.	h investigations and puzzles. Use NRICH it as the children apply their knowledge. 0, 3, 4 and 8.
Maths Unit	Place Value Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) Read and write numbers up to four digits.	Place ValueOrder and compare numbers beyond 1000.Find 1000 more or less than a given number.	Addition Add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate.	Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate.	Subtraction Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate.	Geometry Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. Identify lines of symmetry in 2-D shapes presented in different orientations.	Investigations Week taught this half term throug of application and assessmen tables taught so far – 2, 5, 1
Reasoning/ Problem Solving	Identify , represent and estimate numbers using different representations Solve number and practical problems that involve all of the above and with increasingly large positive numbers.	Identify, represent and estimate numbers using different representations Solve number and practical problems that involve all of the above and with increasingly large positive numbers.	Estimate and use inverse operations to check answers to a calculation. Solve addition two-step problems in contexts, deciding which methods to use and why.	Estimate and use inverse operations to check answers to a calculation. Solve subtraction two-step problems in contexts, deciding which methods to use and why.	Estimate and use inverse operations to check answers to a calculation. Solve subtraction two-step problems in contexts, deciding which methods to use and why.	Complete a simple symmetric figure with respect to a specific line of symmetry	ly skills they have beer iis is a valuable source Review all times
X tables	5s and 10s (the relationship between them, doubles and end in 0 and/or 5) TTRS Counting Sticks End of year target: recall multiplication and division facts for x tables up to 12x12.	5s and 10s (discuss half of 100, half of 50) TTRS Daily Snappy Maths	2s and 4s (the relationships between them – the 4 times tables are double the 2s) TTRS Counting Sticks	2s and 4s (the relationships between them – the 2 times tables are half of the 4 times tables) TTRS Counting Sticks	4s and 8s (the relationships between them – the 8 times tables are double the 4s) TTRS Counting Sticks	4s and 8s (the relationships between them – the 4 times tables are half of the 8 times tables) TTRS Counting Sticks	Allow children to app investigations too, th

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Autumn 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
~	Counting	X 10, 100 and 1000 mentally.	Dividing mentally:	Multiplication and Division	Dividing by 4.	р	Time
Basic Skills / Daily Mental Maths	Count in multiples of 9. Use counting sticks and hundred squares.	Children need to understand that the answer increases in multiplication. The Dienes and the 1, 10, 100, 1000 show visually what happens as the digits move left.	Use place value, known and derived facts to divide mentally, including: dividing by 1.	Continue to multiply and divide by 10, 100 and 1000 mentally in preparation for converting measures later in the year.	Encourage children to halve the number and halve again when dividing by 4. Model this by cutting a 2D shape in half, then halving it again to	gh investigations and application and	Know (and convert) the number of seconds in a minute, and the number of days in each month, year and leap year.
			Example strategies to teach:		model quarters.	rroug e of lge.	
Maths Unit	Measures (Area and Perimeter) Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Find the area of rectilinear shapes by counting squares.	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	Use the inverse to divide. 48 divided by 8 = ? 8 x 8 = 48, so 48 divided by 8 = 8. Partition to divide. 48 divided by 3 = 16 Partition 48 into 30 and 18: 30 divided by 3 = 10 18 divided by 3 = 6 So 10 + 6 = 16	Find the effects of dividing a one or two digit number by 10 and 100, identifying the value in the digits as ones, tenths and hundredths. Children need to understand that the answer decreases in division. The Dienes alongside the 1, 10, 100, 1000 show visually what happens as the digits move left.	Recognise and show, using diagrams, families of common equivalent fractions.	Investigations Week ply skills they have been taught this half term t RICH investigations too, this is a valuable sour assessment as the children apply their knowled	Read, write and convert time between analogue and digital 12- and 24-hour clocks. Try some fun investigations with Santa and time. What time does he start work? How long does he sleep?
Reasoning/ Problem Solving	Inverses: Allow children the opportunity to not only calculate perimeter but to use the perimeter to calculate lengths of sides.	Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Apply these skills in different contexts.	Apply these skills in different contexts.	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	Allow children to ap puzzles. Use N	Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
X tables	TTRS Counting Sticks Focus: 3s and 6s (the relationships between them – the 6 times tables are double the 3s) End of year target: recall multiplication and division facts for x tables up to 12x12.	TTRS Counting Sticks Focus: 3s and 6s (the relationships between them – the 3 times tables are half of the 6 times tables)	TTRS Counting Sticks Focus: 7s (7 is a or tricks, it is full of odd and ever remember and will come up often – keep on practising!)	prime number so no obvious patterns numbers so it is the hardest to on the MTC, this is a memory game	TTRS Counting Sticks Focus: 9s (multiple ones column is decreases by time until it reaches zero and it to 9. The tens column increases each time. You can easily tell v number is a multiple of 9 by ad digits together. If the sum of th equal 9, then the number is a m You can always multiply a num then adjust by subtracting, for e a child is stuck with $3 x 9 = ?$, t multiply 3 by 10, then subtract 27).	tiples of 9 - y one each goes back by one vhether a ding the e digits ultiple of 9. iber by 10 example, if hey can 3 which is	TTRS Counting Sticks Focus: Revisit 7s from week 3 and 4.

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Basic Skills / Daily Mental Maths	Use knowledge of near doubles to add mentally. 25 + 26 = 51 (26 can be partitioned into 25+1, so 25+25 = 50, 50+1=51) $150+152=302 (152 \text{ can be} partitioned to 150 + 2, double 150} is 300, 300 + 2 = 302).$ Progress to 4 digit numbers.	Adjust to subtract mentally (-9 and -11 to start with). 37-9=28 (Adjust 9 by adding one to it to make 10, 37-10 = 27, then adjust the answer by adding 1, 27+1= 28) Apply the same with -11, but encourage children to partition 11 into 10 + 1, take 10 away first, then take 1 away. Progress to apply the above skill to 3 digit numbers.	Multiplication and Division Continue to multiply and divide by 10, 100 and 1000 mentally.	Counting Count in multiples of 25 and 1000. Make links using shapes to 25 = ¼ of 100 and 250 is ¼ of 1000. Use counting sticks and hundred squares.	Number/Fractions Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Use counting sticks, Dienes, 2d shapes	nvestigations and puzzles. Use NRICH is the children apply their knowledge.	Decimals Recognise and write decimal equivalents of any number of tenths or hundredths.
Maths Unit	Addition Add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate.	Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate.	Measures (Volume/capacity/mass/ length) Convert between different units of measure [for example, kilometre to metre; hour to minute]	Round any number to the nearest 10, 100 or 1000.	Fractions (Decimals) Round decimals with one decimal place to the nearest whole number.	igations/Assessment Week taught this half term through i f application and assessment <i>i</i>	Measures (Money) / Fractions Solve simple measure and money problems involving fractions and decimals to two decimal places.
Reasoning/ Problem Solving	Estimate and use inverse operations to check answers to a calculation. Solve addition two-step problems in contexts, deciding which methods to use and why.	Estimate and use inverse operations to check answers to a calculation. Solve subtraction two-step problems in contexts, deciding which methods to use and why.	Estimate, calculate and compare different measures.	Solve number and practical problems involving rounding.	Estimate, compare and calculate different measures, including money in pounds and pence. <i>Convert between pounds and</i> <i>pence.</i>	Invest pply skills they have been 1 this is a valuable source o	Estimate, compare and calculate different measures, including money in pounds and pence. Convert between pounds and pence.
X tables	TTRS Counting Sticks Focus: Revisit 9s from Autumn 2 week 5 and 6. End of year target: recall multiplication and division facts for x tables up to 12x12.	TTRS Counting Sticks Focus: 11s (to find 8x11, children could multiply by 10 then add 8)	TTRS Counting Sticks Focus: 6s and 12s (the relationships between them – the 12 times tables are double of the 6 times tables)	TTRS Counting Sticks Focus: 6s and 12s (the relationships between them – the 6 times tables are half of the 12 times tables)	TTRS Counting Sticks Focus: 6s and 12s (the relationships between them – the 6 times tables are half of the 12 times tables)	Allow children to a investigations too,	TTRS Counting Sticks: 12s (all multiples are even, the 0,2,4,6,8,0 pattern repeats through all the 12x tables $(0, 12, 24, 36,48, 60)$

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			



Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5
Basic Skills / Daily Mental Maths	Decimals Recognise and write decimal equivalents to 1/4 1/2 and 3/4. Recall Known Facts: 25/100 = 0.25 = 1/4 50/100 = 0.5 = 2/4 75/100 = 0.75 = 3/4	Known Facts – Halving Half of 1000 = 500 Half of 500 = 250 Half of 300 = 150 Half of 100 = 50 Half of 50 = 25	Partition to multiply mentally. <i>13 x 4 =</i> <i>Partition 13 into 10 and 3.</i> <i>Multiply 10 x 4 = 40</i> <i>Multiply 3 by 4 = 12</i> <i>So 40 + 12 = 52</i>	Number Count backwards through zero to include negative numbers.	ent Week I taught this half term through stigations too, this is a valuable thildren apply their knowledge.
Maths Unit	Fractions (Decimals) Compare numbers with the same number of decimal places up to two decimal places.	Geometry (angles) Identify acute and obtuse angles. Compare and order angles up to two right angles by size.	MultiplicationRevisit Multiplying two-digit and three-digit numbers by a one-digit number using formal written layout.Move on to multiplying together three numbers, including multiplying by 0 and 1.	Statistics Interpret and present discrete and continuous data using appropriate graphical methods (bar charts).	Investigations/Assessm to apply skills they have bee nd puzzles. Use NRICH inve- cation and assessment as the c
Reasoning/ Problem Solving	Solve simple measure and money problems involving fractions and decimals to two decimal places.	Apply skills above in different contexts.	Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Allow childrer investigations a source of appli
X tables	TTRS Counting Sticks End of year target: recall multiplication and division facts for x tables up to 12x12.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		



Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Basic Skills / Daily Mental Maths	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	stigations and puzzles. ssment as the children	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.
Maths Unit	Decimals Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places.	Number (Roman numerals) Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	Fractions Add and subtract fractions with the same denominator.	Statistics Interpret and present discrete and continuous data using appropriate graphical methods, revisit bar charts and introduce time graphs.	ns/Assessment Week taught this half term through inve te source of application and asse heir knowledge.	Geometry Describe positions on a 2-D grid as coordinates in the first quadrant. Describe movements between positions as translations of a given unit to the left/right and up/down
Reasoning/ Problem Solving Opportunities	Solve simple measure and money problems involving fractions and decimals to two decimal places.	Apply knowledge of Roman numerals in other contexts such as telling the time	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Investigatio ply skills they have been 1 gations too, this is a valual apply t	Plot specified points and draw sides to complete a given polygon.
X tables	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Allow children to a Use NRICH investi	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.									
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			



Summer 2	Week 1 MTC testing	Week 2 MTC testing	Week 3 MTC testing	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Multiplication and Division Recognise and use factor pairs and commutativity in mental calculations. One factor of 36 is 4, what is its pair?	Multiplication and Division Doubling and having numbers up to 4 digits.	Week oeen taught this half les. Use NRICH ee of application and eir knowledge.	ed to revisit.
Maths Unit	w of the four culations.	letry Review	ber Review.	ions Review	nd Measures and Review	nvestigations/Assessment t to apply skills they have l gh investigations and puzz too, this is a valuable sourc nt as the children apply th	nits that the children ne
Reasoning/ Problem Solving Opportunities	Revier cal	Geom	Num	Fract	Statistics a	Allow childrer term throu investigations i assessme	Veek – Revise u
X tables	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	Prepare for MTC – use individual heat map grids to target the children in class. Times tables starters all this half term.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	2 Day V

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		



Autumn 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	Counting Count forwards and backwards in steps of powers of 10 from any given number up to 1 000 000. Use counting sticks, and/or Gattegno charts to model counting.		Using partitioning to add with increasingly larger numbers (move on to bigger numbers as needed) 432 + 123 = 400 + 100 30 + 20 2+ 3	Using partitioning to subtract (move on to bigger numbers as needed). 432 - 123 = 423 – 100 – 20 – 3	Count on a number line to subtract (move on to bigger numbers as needed). 300 - 99 = 99 + 1 = 100 100 + 200 = 300 So 200 + 1 = 201	Multiples and Factors Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.	s and puzzles. Use NRICH 1 apply their knowledge.
Maths Unit	Place Value Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.	Place Value Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.	Addition Add whole numbers with more than 4 digits, including using formal written methods (columnar addition)	Subtraction Subtract whole numbers with more than 4 digits, including using formal written methods (columnar subtraction)	Addition & Subtraction Problem Solving week Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Use a variety of resources such as NRICH worded problems to enable the children to practise	Geometry Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. Bring empty packaging such as toothpaste box, Toblerone box etc. Cut them open so the children see the nets and discuss the 2D shapes on the faces. Allow the children to investigate many everyday packages	stigations Week thalf term through investigation n and assessment as the children
Reasoning/ Problem Solving	Solve number problems and practical problems that involve all of the above.	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Solve addition multi-step problems in contexts, deciding which operations and methods to use and why.	Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	their addition and subtraction skills learnt in various contexts. Allow them to estimate answers, work in pairs/independently/groups, reason, explain and work systematically.	before moving on to identifying nets and creating their own.	Investigation of application of appl
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	Allow children to apply skills the investigations too, this is a valual

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		





Autumn 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	X 10, 100 and 1000 mentally. Children need to understand that the answer increases in multiplication. The Dienes and the 1, 10, 100, 1000 on place value board show visually what happens as the digits move left.	Divide by 10, 100 and 1000 mentally. Children need to understand that the answer decreases in division. The Dienes and the 1, 10, 100, 1000 on place value board show visually what happens as the digits move right.	Prime Numbers and Prime Factors Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers.	Number. Establish whether a number up to 100 is prime and recall prime numbers up to 19.	Recognise factor pairs to aid mental calculations 4x3 = 12 40 x 3 = 120 400 x 3 = 1200	through investigations urce of application and	Counting in fractions past 1 Fraction number linear lines
Maths Unit	Multiplication Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	Division Divide numbers up to 4 digits by a one- digit number using the formal written method of short division and interpret remainders appropriately for the context.	Fractions Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	Fractions Compare and order fractions whose denominators are all multiples of the same number.	Measurement Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes.	gations Week been taught this half term too, this is a valuable so	Measurement Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
Reasoning/ Problem Solving	Solve problems involving multiplication.	Solve problems involving division.	Apply these skills in different context representations.	s and through different visual	Find the value of missing lengths of sides using the formulae for area.	Investi y skills they have I CH investigations	Use all four operations to solve problems involving measure.
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	Allow children to appl: and puzzles. Use NRI0	TTRS Counting Sticks

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.									
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			



Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental ^D Maths	Number inside a number with 3-digit numbers to add and subtract. 360 - 82 = 360 - 60 - 20 -2	Round and adjust to add. $452 + 103 = 450 + 100 + 2 + \frac{3}{3}$	Square Numbers Recognise and use square numbers numbers, and the notation for squared (2).	Cube Numbers Recognise and use cube numbers, and the notation for cubed (3).	Fractions Recognise and write decimal equivalents to ¹ / ₄ ¹ / ₂ and 3/4. <i>Recall Known Facts:</i> 25/100 = 0.25 = ¹ / ₄ 50/100 = 0.5 = 2/4 75/100 = 0.75 = 3/4	ons and puzzles. Use NRICH dren apply their knowledge.	Measurement (Time) Know (and convert) the number of seconds in a minute, and the number of days in each month, year and leap year.
Maths Unit	Geometry Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles Draw given angles, and measure them in degrees (o)	Addition and Subtraction, Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Multiplication and Division Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.	Fractions (Decimals) Read, write, order and compare mplaces. Round decimals with two decimal and to one decimal place. Recognise and use thousandths ar and decimal equivalents. Read and write decimal numbers 71/100].	umbers with up to three decimal l places to the nearest whole number nd relate them to tenths, hundredths as fractions [for example, 0.71 =	Investigations Week taught this half term through investigati of application and assessment as the child	Statistics Complete, read and interpret information in tables, including timetables.
Reasoning/ Problem Solving	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	Solve problems involving number	r up to three decimal places.	iills they have been a valuable source o	Begin to decide which representations of data are most appropriate and why.
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	Allow children to apply sk investigations too, this is	TTRS Counting Sticks

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.									
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5
Basic Skills / Daily Mental Maths	Roman Numerals Read Roman Numerals to 1000 (M) and recognise years written in Roman Numerals.	Partition to multiply 123 x 5 = 100 x 5 20 x 5 3 x 5	Partition to divide 126 divided by 6 = 120 divided by 6 then 6 divided by 6	Multiplication and Division Recognise and use factor pairs and commutativity in mental calculations. One factor of 36 is 4, what is its pair?	k we been taught this uzzles. Use NRICH ource of application / their knowledge.
Maths Unit	Measurement Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	Geometry Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Fractions Add and subtract fractions with the same denominator and denominators that are multiples of the same number.	Fractions Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	Investigations Wee in to apply skills they had gh investigations and p too, this is a valuable so and as the children apply
Reasoning/ Problem Solving	Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	Become accurate in drawing lines with a ruler to the nearest millimetre, and measuring with a protractor.	Solve problems which require knowing percenta those fractions with a denominator of a multiple	Allow children half term throu investigations : and assessme	
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		





Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Basic Skills / Daily Mental Maths	Adding using number inside a number strategy. 37+ 45 = 37+ 3 + 40 + 2 Progress to apply the above skill to 3 and 4 digit numbers	Compensate to subtract 35 – 18 = ? Add two to 18 to make 20 (friendly number) 35 - 20 = 15 Then add 2 back on 15+2=17 Progress to apply the above skill to 3 and 4 digit numbers.	Subtracting from 90, 180 and 360 using number inside a number method (see Spring 1 Week 1)	Use near doubles to add 123 + 125 = 125 + 125 - 2	gh investigations and puzzles. Use sesment as the children apply their	Known Facts – Halving Half of 1000 = 500 Half of 500 = 250 Half of 300 = 150 Half of 100 = 50 Half of 50 = 25
Maths Unit	Statistics Solve comparison, sum and difference problems using information presented in a line graph.	Number Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.	Measurement Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]	Geometry Identify: angles at a point and one whole turn (total 360o), angles at a point on a straight line and 1/2 a turn (total 180o) and other multiples of 90o.	tions Week this half term throug f application and ass vledge.	Place Value Read Roman numerals to 1000 (M) and recognise years written in Roman numerals
Reasoning/ Problem Solving Opportunities	Begin to decide which representations of data are most appropriate and why.	Solve number problems and practical problems that involve all of the above	Missing measures questions for volume to find a missing value. Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	Use angle sum facts and other properties to make deductions about missing angles and relate these to missing number problems	Investiga they have been taught s is a valuable source o know	Solve number problems and practical problems that involve all of the above
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	Allow children to apply skills NRICH investigations too, this	TTRS Counting Sticks

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.									
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			



Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
Basic Skills / Daily Mental Maths	Use AfL to revisit mental strategies that the children would benefit from being taught again.							
Maths Unit	Fractions Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $2/5 + 4/5 = 6/5 = 1 1/5$.	Fractions Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.	Measurement Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	Geometry Use the properties of rectangles to deduce related facts and find missing lengths and angles	Geometry Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	Investigations Week to apply skills they have by gh investigations and puzzle oo, this is a valuable source nt as the children apply thei	lat the children need to re	
Reasoning/ Problem Solving Opportunities	Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.		e problems which require knowing percentage and decimal valents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator multiple of 10 or 25. Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.		Recognise and use reflection and translation in a variety of diagrams, including continuing to use a 2-D grid and coordinates in the first quadrant. Reflection should be in lines that are parallel to the axes.	Allow children half term throug investigations t and assessme	- Revise units th	
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	2 Day Week -	

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			



Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.									
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures			



Autumn 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	Using partitioning to add with increasingly larger numbers (move on to bigger numbers as needed) 432 + 123 = 400 + 100 30 + 20 2+ 3 Counting forwards and backwards in hundreds and thousands from any given numbers. Rapid recall of the value of each digit in given numbers to 10,000,000	Number inside a number to calculate – 360-95 = 360 – 60 – 30 – 5 Progress to larger numbers. Multiplying and dividing numbers by 10, 100, 1000.	Count on a number line to subtract (move on to bigger numbers as needed). 300 - 99 = $99 + \frac{1}{1} = 100$ 100 + 200 = 300 So $200 + 1 = 201$ Inverse operations including multiples and factors.	Multiply by partitioning 132 x 5 = 100 x 5 30 x 5 and 2 x 5 Progress to larger numbers.	Using known multiplication facts and inverse division facts to solve calculations 7 x 5 = 35 70 x 5 = 350 Progress to larger numbers.	stigations and puzzles. Use NRICH he children apply their knowledge.	Measurement (Time) Know (and convert) the number of seconds in a minute, and the number of days in each month, year and leap year.
Maths Unit	Number Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.	Number Round any whole number to a required degree of accuracy.	Addition and Subtraction Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Multiplication Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication	Division Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.	estigations/Assessment Week an taught this half term through inv s of application and assessment as t	Multiplication and Division Use their knowledge of the order of operations to carry out calculations involving the four operations
Reasoning/ Problem Solving	Solve number and practical the above.	problems that involve all of	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.	Solve problems involving multiplication and division.	Solve problems involving multiplication and division.	In v kills they have bee s a valuable source	Explore the order of operations using brackets; for example, $2 + 1 \ge 3 = 5$ and $(2 + 1) \ge 3 = 9$.
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	Allow children to apply sl investigations too, this i	TTRS Counting Sticks

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		

Autumn 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	L
Basic Skills / Daily Mental Maths	Multiples and Factors Identify common multiples and factors.	Multiplication Multiplying by 10, 100 and 1000. Model with a place value board.	Division Dividing by 10, 100 and 1000. Model with a place value board.	Multiplication and Division Multiplying and dividing by 10, 100 and 1000. Model with a place value board.	Addition Use near doubles to add 123 + 125 = 125 + 125 – 2 Progress to larger numbers.	ons and puzzles. Use NRICH dren apply their knowledge.	Compensate to subtract 35 - 18 = ? Add two to 18 to make 20 (friendly number) 35 - 20 = 15 Then add 2 back on 15+2=17 Progress to apply the above skill to 3 and 4 digit numbers.	No. of the second se
Maths Unit	Geometry Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	Fractions Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. Compare and order fractions, including fractions > 1.	Fractions Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.	Measurement Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places Convert between miles and kilometres.	Statistics Calculate and interpret the mean as an average. Interpret and construct pie charts and line graphs and use these to solve problems.	tigations/Assessment Week taught this half term through investigati f application and assessment as the chil	Measurement (Area and Perimeter) Calculate the area of parallelograms and triangles	
Reasoning/ Problem Solving	Draw 2-D shapes using given dimensions and angles.	Solve problems involving the above.		Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.	Solve problems involving all of the above in different contexts.	Invest Iren to apply skills they have been t ions too, this is a valuable source o	Recognise when it is possible to use formulae for area of shapes Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.	
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting sticks	Allow child investigati	TTRS Counting Sticks	

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		



TTRS heat maps and daily recall.			

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		

Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
al	Multiplication & Division	Multiplication and Division	Fractions	Fractions	Fractions		Roman Numerals
Basic Skills / Daily Ment Maths	Identify prime numbers.	Recognise and use factor pairs and commutativity in mental calculations. One factor of 36 is 4, what is its pair?	Find fractions of amounts.	Find percentages of amounts.	Recognise and write decimal equivalents to ¼ ½ and 3/4. <i>Recall Known Facts:</i> 25/100 = 0.25 = ¼ 50/100 = 0.5 = 2/4 75/100 = 0.75 = 3/4	s and puzzles. Use NRICH en apply their knowledge.	Read Roman Numerals to 1000 (M) and recognise years written in Roman Numerals.
	Geometry	Division	Fractions	Fractions	Fractions	ldre	Measurement
Maths Unit	Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane, and reflect them in the axes	Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.	Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} =$ $\frac{1}{8}$] Multiply one-digit numbers with up to two decimal places by whole numbers.	Divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$] Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]. Use written division methods in cases where the answer has up to two decimal places.	stigations/Assessment Week taught this half term through investigat of application and assessment as the chi	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3]
Reasoning/ Problem Solving	Solve problems involving missing coordinates.	Solve problems involving the above.	Use written division methods in cases places. Solve problems which require answer accuracy. Recall and use equivalences between percentages, including in different con	where the answer has up to two decimal s to be rounded to specified degrees of simple fractions, decimals and ntexts.	Solve problems involving multiplication and division.	Inve skills they have been is a valuable source	Solve problems involving volume. Recognise when it is possible to use formulae for volume of shapes
X tables	TTRS Counting Sticks Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	Allow children to apply investigations too, this	TTRS Counting sticks

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.								
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures		



	Known Facts – Halving	Partition to divide	Partition to multiply	Square Numbers	Cube Numbers	
Basic Skills / Daily Mental Maths	Half of $1000 = 500$ Half of $500 = 250$ Half of $300 = 150$ Half of $100 = 50$ Half of $50 = 25$ Apply this pattern to larger numbers.	126 divided by 6 = 120 divided by 6 then 6 divided by 6	123 x 5 = 100 x 5 20 x 5 3 x 5 Progress to larger numbers.	Recognise and use square numbers numbers, and the notation for squared (2).	Recognise and use cube numbers, and the notation for cubed (3).	
	Statistics	Geometry	Number	Four operations		
	Use simple formulae	Recognise, describe and build simple 3-D shapes, including making nets	Use negative numbers in context, and calculate intervals across zero.	Use their knowledge of the order of operations the four operations.	to carry out calculations involving	
nit	sequences.	Geometry		Perform mental calculations, including with mixed operations and large numbers		
Maths U	Express missing number problems algebraically	Illustrate and name parts of circles, including radius, diameter and circumference and know		Solve problems involving addition, subtraction, multiplication and division		
	Find pairs of numbers that satisfy an equation with two unknowns	that the diameter is twice the radius		Solve problems involving the relative sizes of t can be found by using integer multiplication an	wo quantities where missing values ad division facts.	
	Enumerate possibilities of combinations of two variables			Solve problems involving unequal sharing and fractions and multiples	grouping using knowledge of	
ğı	Solve problems involving all of the above.	Draw shapes and nets accurately, using measuring tools and conventional markings and labels for lines and angles	Solve problems involving interpreting graphs involving negative numbers.	Solve problems involving similar shapes where found	the scale factor is known or can be	
soning/ m Solvir		and facers for fines and angles.		Solve problems involving the calculation of pe measures, and such as 15% of 360] and the use	rcentages [for example, of of percentages for comparison.	
Rea Proble				Explore the order of operations using brackets; 1) x $3 = 9$.	for example, $2 + 1 \ge 3 = 5$ and $(2 + 1) \ge 5$	
	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	
X tables	Children should be secure with all of their tables up to x12 by the end of Year 4. Identify those who are not and target them through TTRS heat maps and daily recall.	č		ŭ		

	Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
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Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.						
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures



Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.							
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures	



Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
Basic Skills / Daily Mental Maths	Allow the children to apply what they have learnt so far in a variety of different ways and contexts:							
Maths Unit	 NRICH investigations and puzzles. Address gaps in learning. Year 6 Enterprise Project. Maths Transition activities. Daily Times Tables 							
Reasoning/ Problem Solving Opportunities	Daily Times Tables							
Investigation Opportunities								
X tables	TTRS Daily Snappy Maths End of year target: recall multiplication and division facts for x tables up to 12x12.	TTRS Daily Snappy Maths	TTRS Daily Snappy Maths	TTRS Daily Snappy Maths	TTRS Daily Snappy Maths	TTRS Daily S.M.		

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.							
Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures	