

Mathematics Medium Term Plan (Linked to NCETM Curriculum Prioritisation Plans)



Autumn Term- Year 4

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	
Unit 1 (3 weeks) Review of column addition and subtraction Identify the addends and the sum in column addition Use their knowledge of place value to correctly lay out column addition Add a pair of 2-digit numbers using column addition Add using column addition Use their knowledge of column addition to solve problems Add a pair of 2-digit numbers using column addition with regrouping in the ones column Add a pair of 2-digit numbers using column addition with regrouping in the tens column Add using column addition with regrouping Use known facts and strategies to accurately and efficiently calculate and check column addition Use their knowledge of column addition to solve problems Identify the minuend and the subtrahend in column subtraction Subtract using column subtraction Subtract from a 2-digit number using column subtraction with exchanging from tens to ones Subtract from a 3-digit number using column subtraction with exchanging from hundreds to tens Evaluate the efficiency of strategies for subtraction			Unit 2 (5 weeks) Numbers to 10,000 Explain how many tens, hundreds and ones 1,000 is composed of Use knowledge of 1,000 to explain common measure conversions Use knowledge of 1,000 to solve problems Use different strategies to add multiples of 100 Use different strategies to subtract multiples of 100 Use knowledge of calculation and common measure conversions to solve problems Compose and decompose four-digit numbers in different ways Use strategies to make solving calculations more efficient Compare and order four-digit numbers Calculate efficiently by using knowledge of place value, addition and subtraction Explain what rounding is Round a four-digit number to the nearest thousand Round a four-digit number to the nearest hundred and ten Round a four-digit number to the nearest thousand, hundred and ten Add up to 3 four-digit numbers using a column addition Subtract four-digit numbers using a column subtraction Use strategies to make solving calculations more efficient Explain how many '100s' and '200s', 1,000 is composed of Explain how many '500s' and '250s', 1,000 is composed of					
Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15		
Unit 3 (2 weeks) Perimeter A regular polygon has sides that are all the same length and interior angles that are all equal in size Perimeter is the distance around the edge of a two-dimensional shape Different shapes can have the same perimeter Perimeter is measured in units of length and can be found by counting units Perimeter can be calculated by adding together the side lengths of a 2D shape The perimeter of a rectangle can be calculated by addition and multiplication Unknown side lengths can be calculated from perimeter and known side lengths The perimeter of a regular polygon can be calculated by multiplication The side length of a regular polygon can be calculated by division where the perimeter is known		Unit 4 (4 weeks) 3,6,9 Times Tables Represent counting in threes as the three times table Explain the relationship between adjacent multiples of three Use knowledge of the three times table to solve problem Represent counting in sixes as the six times table Explain the relationship between adjacent multiples of six Use knowledge of the six times table to solve problems Use known facts from the five times table to solve problems involving the six times table Explain the relationship between multiples of three and multiples of six Use knowledge of the relationships between the three and six times tables to solve problems Represent counting in nines as the nine times table Explain the relationship between adjacent multiples of nine (1) Explain the relationship between adjacent multiples of nine (2) Use known facts from the ten times table to solve problems involving the nine times table Explain the relationship between multiples of three and multiples of nine Explain the relationship between pairs of three and nine times table facts that have the same product (1) Use the divisibility rules for divisors of three Use the divisibility rules for divisors of six (1) Use the divisibility rules for divisors of six (2)			Termly Assessments - NFER		Unit 4 ctd 3,6,9 Times Tables (Times Tables consolidation)	

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Spring Term- Year 4

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
<p>Unit 5 (2 weeks) 7 times table and patterns Represent counting in sevens as the 7 times table Explain the relationship between adjacent multiples of seven Use their knowledge of the 7 times table to solve problems Identify patterns of odd and even numbers in the times tables Represent a square number Use knowledge of divisibility rules to solve problems</p>		<p>Unit 6 (5 weeks) Understanding and manipulating multiplicative relationships Explain what each factor represents in a multiplication equation Explain how each part of a multiplication and division equation relates to a story Explain where zero can be part of a multiplication or division expression and the impact it has Partition one of the factors in a multiplication equation in different ways using representations (I) Partition one of the factors in a multiplication equation in different ways using representations (II) Explain which is the most efficient factor to partition to solve a multiplication problem Use knowledge of distributive law to solve two-part addition and subtraction problems, efficiently Use knowledge of distributive law to calculate products beyond known times tables facts Explain the relationship between multiplying a number by 10 and multiples of 10 Explain why a zero can be placed after the final digit of a single-digit number when we multiply it by 10 Explain why a zero can be placed after the final digit of a two-digit number when we multiply it by 10 Explain why the final digit zero can be removed from a two-digit multiple of 10, when we divide by 10 Explain why the final digit zero can be removed from a three-digit multiple of 10, when we divide by 10 Explain the relationship between multiplying a number by 100 and multiples of 100 Explain why two zeros can be placed after the final digit of a single-digit number when we multiply it by 100 Explain why two zeros can be placed after the final digit of a two-digit number when we multiply it by 100 Explain why the last two zeros can be removed from a three-digit multiple of 100 when we divide it by 100 Explain why the last two zeros can be removed from a four-digit multiple of 100 when we divide it by 100 Use knowledge of the composition of 100 to multiply by 100 in different ways Use knowledge of the composition of 100 to divide by 100 in different ways Explain how making a factor 10 times the size affects the product Explain how making the dividend 10 times the size affects the quotient Explain how making a factor 100 times the size affects the product Explain how making the dividend 100 times the size affects the quotient Scale known multiplication facts by 100 Scale division derived from multiplication facts by 100</p>					
Week 8	Week 9	Week 10	Week 11	Week 12	Week 13		
<p>Unit 7 Coordinates (2 weeks) Give directions from one position to another Move objects including polygons on a grid according to directions, and mark new position Describe translations of polygons drawn on a square grid Draw polygons specified by translations Mark points specified as a translation from the origin Mark the position of points specified by coordinates in the first quadrant of a coordinate grid, and write coordinates for already-marked points Draw polygons specified by coordinates in the first quadrant Translate polygons in the first quadrant</p>		<p>8 Times Table – See NCETM Unit 2.7 (Revision from Y3)</p> <p>11, 12 Times Tables – See NCETM Unit 2.11</p>		<p>Termly Assessments - NFER</p>	<p>Statistics Constructing and presenting data using appropriate graphical methods including bar charts and time graphs</p>		

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Summer Term- Year 4

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
<p>Unit 8 (1 week)</p> <p>Review of Fractions</p> <p>Identify a whole and the parts that make it up Explain why a part can only be defined when in relation to a whole Identify the number of equal or unequal parts in a whole Identify equal parts when they do not look the same Explain the size of the part in relation to the whole Construct a whole when given a part and the number of parts</p>	<p>Unit 9 (5 weeks)</p> <p>Fractions greater than 1</p> <p>Explain how to express quantities made up of both whole numbers and a fractional part Explain how a quantity made up of whole numbers and a fractional part is composed Compose and decompose quantities made of whole numbers and fractional parts Accurately label a range of number lines and explain the meaning of each part Identify numbers on marked but unlabelled number lines Estimate the position of numbers on a number line using fraction sense Compare and order mixed numbers using fraction sense Compare and order mixed numbers when the whole number is the same Compare and order mixed numbers when the whole number and the numerator of the fractional part is the same Make efficient choices about the order they solve an addition problem in Make efficient choices about the order they solve a subtraction problem in Express a quantity as a mixed number and an improper fraction (quarters) Convert a quantity from an improper fraction to a mixed number (quarters) Express and convert a quantity from an improper fraction to a mixed number (fifths) Explain how an improper fraction is converted into a mixed number (any unit) Explain how a mixed number is converted into an improper fraction Add mixed numbers Subtract a proper fraction from a mixed number (converting to an improper fraction first) Subtract a mixed number from a mixed number and explain which strategy is most efficient Use knowledge of subtraction to choose correct and efficient approaches when subtracting mixed numbers</p>					<p>Termly Assessments - NFER</p>	
<p>Week 8</p> <p>Unit 10 (2 weeks)</p> <p>Symmetry in 2D shapes</p> <p>Complete a symmetrical pattern Compose symmetrical shapes from two congruent shapes Investigate lines of symmetry in 2D shapes by folding paper shape cut-outs Find lines of symmetry in 2D shapes using a mirror Reflect polygons in a line of symmetry Reflect polygons that are dissected by a line of symmetry</p>	<p>Week 9</p>	<p>Week 10</p> <p>Unit 11 (1 week)</p> <p>Time</p> <p>Follow link to NCETM guidance https://www.ncetm.org.uk/classroom-resources/cp-year-4-unit-11-time/</p>	<p>Week 11</p> <p>Unit 12 (2 weeks)</p> <p>Division with remainders</p> <p>Interpret a division story when there is a remainder and represent it with an equation (i) Interpret a division story when there is a remainder and represent it with an equation (ii) Interpret a division story when there is a remainder and represent it with an equation (iii) Explain how the remainder relates to the divisor in a division equation Explain when there will and will not be a remainder in a division equation Use knowledge of division equations and remainders to solve problems Interpret the answer to a division calculation to solve a problem (i) Interpret the answer to a division calculation to solve a problem (ii)</p>	<p>Week 12</p>	<p>Week 13</p> <p>Fractions consolidation</p>		

Year 4 Yearly Overview (Linked to NCETM Curriculum Prioritisation Materials)



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Autumn	NCETM Unit 1 Review of column addition and subtraction		NCETM Unit 2 Numbers to 10,000					NCETM Unit 3 Perimeter		NCETM Unit 4 3,6,9 Times Tables			Assessment	Times Tables ctd	
Spring	NCETM Unit 5 7 times table and patterns		NCETM Unit 6 Understanding and manipulating multiplicative relationships					NCETM Unit 7 Coordinates		Times Tables x8 x11, x12		Assessment	Statistics		
Summer	NCETM Unit 8 Review of fractions	NCETM Unit 9 Fractions greater than 1					Assessment	NCETM Unit 10 Symmetry in 2D shapes		NCETM Unit 11 Time	NCETM Unit 12 Division with remainder		Fractions (consolidation)		

Notes:

The 11 and 12 times tables are not covered by the prioritisation materials but will need to be covered in regular times table activities in preparation for the Year 4 multiplication check. NCETM Unit 2.11 provides support for this.

'Constructing and presenting data' is not covered by the prioritisation materials and ideally can be addressed in the foundation subjects in a relevant context such as science or geography.