Curriculum Expectations for Maths

Year 1

BIG Maths – CLIC. Learn its	Number and calculations	Measurement	Geometry
Addition: • 1+9, 2+8=10, 3+7=10, 4+6, 5+5=10; • 4+2, 5+2, 6+2, 7+2, 9+2, 4+3, 5+3, 6+3 • 6+6, 7+7, 8+8, 9+9 ***Multiplication:*** • Multiples of 5 – In counting • Multiples of 2 – In counting	• Count to/across 100 • Count in 1s, 2s, 5s and 10s • Identify 'one more' and 'one less' • Read and write numbers to 20 in words and numerals • Use objects and pictures to represent numbers • Use language of comparison • Use +, – and = signs • Know number bonds to 20 • Add and subtract numbers 0 to 20 • Solve one-step problems • Recognise and use 1/2 and 1/4	• Compare, describe, measure, record and solve problems for lengths, weights, capacities/volumes and times • Recognise coins and notes • Sequence events chronologically using ordering language • Use language relating to dates • Tell time to the hour and half-hour	Recognise and name common 2D and 3D shapes • Describe position, direction and movement, including 1/2 , ¼ and 34 turns

Year 2

BIG Maths – CLIC. Learn its	Number and calculations	Measurement	Geometry	Statistics
Addition: • 3+8, 3+9, 4+7, 4+8, 4+9; • 5+4, 5+6, 6+7, 8+7, 8+9; • 5+9, 6+9, 7+9, 5+7, 5+8, 6+8 ***Multiplication:*** • X 10 table • X 2 table • X 5 table	• Count in 2s, 3s, 5s and 10s • Use place value • Identify, represent and estimate numbers • Compare and order numbers 0 to 100; use < > = • Read and write numbers to at least 100 in numerals and words • Know number facts to 20 and derive related facts to 100 • Add and subtract using concrete, pictorial and mental methods • Recognise addition is commutative • Recognise and apply inverse relationship between addition and subtraction • Know 2, 5 and 10 times tables; write facts using ×, ÷ and = • Recognise multiplication is commutative • Recognise, find, name and write 1/3, ¼, , 2/4, and ¾ • Recognise equivalence of 2/4 and ½ • Solve problems related to place value	• Choose and use appropriate standard units • Compare and order length, mass, volume capacity; record using <, > and = • Use £ and p signs; combine coins to a given value and find different combinations • Solve problems involving adding/ subtracting money • Compare and order time intervals • Tell time to nearest five minutes • Know the number of minutes in an hour/ hours in a day	• Identify and describe 2D and 3D shapes • Identify 2D shapes on surfaces of 3D shapes • Compare and sort common 2D and 3D shapes and everyday objects • Arrange shapes in patterns/sequences • Use vocabulary of position, direction and movement	Interpret and draw simple pictograms, tally charts, block diagrams and tables • Ask and answer comparison and totalling questions

Year 3

BIG Maths – CLIC. Learn its	Number and calculations	Measurement	Geometry	Statistics
• X 3 table • X 4 table • X 8 table	• Count from 0 in 4s, 8s, 50s and 100s; find 10 or 100 more/less • Numbers to 1000: recognise place value of each digit; compare and order; read and write in numerals and words • Identify, represent and estimate numbers in different ways • Mentally add and subtract ones, tens or hundreds to/from numbers with up to three digits • Add and subtract numbers with up to three digits in columns • Estimate answers and check using inverse operations • Learn 3, 4 and 8 times tables • Multiply and divide two-digit by one-digit numbers • Use tenths and count in tenths • Recognise, find and write fractions of sets of objects • Recognise and use fractions as numbers • Recognise some equivalent fractions • Add/subtract fractions with the same denominator up to <1 • Order unit fractions and fractions with common denominators • Solve problems relating to all aspects of number	• Measure and calculate with metric units • Measure perimeter of simple 2D shapes • Add/subtract money in context • Tell analogue time (including Roman numerals and 12- and 24-hour clocks) • Estimate and read time to nearest minute; record and compare times; use time vocabulary • Know the number of seconds in a minute and days in each month/year/leap year • Compare durations of events	• Draw 2D and make 3D shapes • Recognise angles as a property of a shape or a description of a turn • Identify right angles; use them to describe fractions of a turn; compare other angles to them • Identify horizontal, vertical, perpendicular and parallel lines	• Interpret, draw and answer one- and two-step questions about bar charts, pictograms and tables

Year 4

Maths				
BIG Maths – CLIC. Learn its	**Number and calcualtions**	**Measurement**	**Geometry**	**Statistics**
• The Six Fact Challenge! 6 x 6; 9 x 6; 9 x 9; 7 x 9; 7 x 7; 6 x 7 • X 11 table • X 12 table	• Count in multiples of 6, 7, 9, 25 and 1000 • Find 1000 more/less • Count backwards to include negative numbers • Recognise place value of each digit in a four-digit number • Order and compare numbers beyond 1000 • Identify, represent and estimate numbers in different ways • Round numbers to nearest 10, 100 or 1000 • Solve problems with larger positive numbers • Use Roman numerals to 100 (C) • Add and subtract numbers with up to four digits in columns • Estimate and use inverse operations to check answers • Solve two-step addition and subtraction problems • Know all tables to 12 × 12 • Multiply and divide mentally • Use factor pairs and commutativity in mental calculations • Use standard short multiplication to multiply two and three-digit numbers by a one-digit number • Solve problems involving multiplying and dividing • Recognise common equivalent fractions • Count up and down in hundredths	• Convert between units of measure • Measure and calculate perimeter of right-angled shapes • Find area of right-angled shapes by counting squares • Estimate, compare and calculate different measures • Read, write and convert times between analogue and digital and between 12- and 24-hour • Solve time conversion problems	• Compare and classify 2D shapes, including quadrilaterals and triangles • Identify, compare and order acute, obtuse and right angles • Identify lines of symmetry in 2D shapes • Complete a simple symmetric figure • Use first quadrant coordinates • Introduce simple translations • Plot points and draw sides to complete a polygon	• Use bar charts, pictograms, tables and time graphs

	• Solve problems involving increasingly harder fractions • Add and subtract fractions with common denominators • Recognise and write decimal equivalents of any number of tenths and hundredths and of ¼, ½, and 3/4 • Find the effect of dividing a one- or two-digit number by 10 and 100 • Round decimals with one dp to whole numbers • Compare numbers with same number of decimal places up to two dp • Solve measure and money problems involving fractions and decimals			

Year 5

Maths **BIG Maths – CLIC. Learn its**: Review all tables up to 12 x 12 and related division facts			
Number and calculations	**Measurement**	**Geometry**	**Statistics**
• Numbers to at least 1 million: read, write, order, compare; know place value; round to nearest power of 10; count on/back in powers of 10 • Use negative whole numbers in context • Roman numerals: read numbers to 1000 and years • Add and subtract whole numbers with more than four digits using column methods • Mentally add and subtract increasingly large numbers • Use rounding to check answers • Identify multiples, factors, prime numbers, prime factors and composite numbers • Find primes to 100; recall primes to 19 • Multiply numbers up to four digits by a one- or two digit number using formal written method • Multiply and divide numbers mentally • Divide numbers up to four digits by a one-digit number using formal written method; interpret remainders • Multiply and divide by powers of 10 • Use square and cube numbers; use 2 and 3 notation • Compare and order fractions • Identify, name and write equivalent fractions • Use mixed numbers and improper fractions and convert between them • Add and subtract fractions with common/related denominators • Multiply fractions by whole numbers • Write decimals as fractions • Recognise and use thousandths and relate to tenths, hundredths and decimal equivalents • Order and round decimal numbers • Recognise and understand % sign; link percentages to fractions and decimals • Solve problems involving all aspects of number, including multi-step problems	• Convert between metric units and between metric and imperial units • Measure and calculate the perimeter of composite right-angled shapes • Calculate and compare area of rectangles; estimate area of irregular shapes • Estimate volume and capacity • Use four operations to solve measure problems using decimal notation • Solve problems involving converting between units of time • Use all four operations to solve measure problems	• Identify 3D shapes from 2D representations • Measure, estimate, compare and draw angles in degrees • Identify angles: at a point (whole turn); on a straight line (half turn); other multiples of 90° • Finding missing lengths and angles in rectangles • Distinguish between regular and irregular polygons • Reflect and translate shapes	• Solve problems based on line graphs • Complete, read and interpret information in tables

Year 6

<table>
<tr><th colspan="3">Maths
BIG Maths – CLIC. Learn its Review all tables up to 12 x 12 and related division facts</th></tr>
<tr><th>Number and calculations</th><th>Measurement</th><th>Geometry</th></tr>
<tr><td>• Numbers to 10 million: read, write, order, compare; know place value; round to a given degree of accuracy
• Use negative numbers in context; calculate intervals across zero
• Multiply and divide numbers up to four digits by a two-digit whole number using formal written methods; interpret remainders
• Perform challenging mental calculations
• Identify common factors, common multiples and primes
• Use order of operations
• Use estimation to check answers
• Simplify, compare and order fractions
• Use equivalents to add and subtract fractions
• Multiply simple fractions together and divide fractions by whole numbers
• Associate a fraction with division and calculate decimal fraction equivalents
• Know place value to three decimal places; multiply and divide numbers by 10, 100 and 1000
• Multiply one-digit numbers with up to two dp by whole numbers
• Use written division for answers with up to two dp
• Recall and use equivalences between simple fractions, decimals and percentages
• Solve problems involving all aspects of number, including multi-step problems</td><td>• Use a range of measures and conversions, using decimals up to three dp
• Convert between miles and kilometres
• Know that shapes with the same area can have different perimeters and vice versa
• Use area and volume formulae
• Calculate area of triangles and parallelograms
• Calculate, estimate and compare volumes of cubes and cuboids</td><td>• Draw 2D shapes given dimensions and angles
• Describe and build simple 3D shapes
• Classify shapes by properties
• Understand circle terminology
• Know and use angle rules to find unknown angles
• Describe positions on full coordinate grid
• Translate and reflect shapes using all four quadrants</td></tr>
<tr><th>Algebra</th><th>Ratio and Proportion</th><th>Statistics</th></tr>
<tr><td>• Use simple formulae
• Generate and describe linear number sequences
• Express missing number problems algebraically
• Find pairs of numbers that satisfy an equation with two unknowns
• Enumerate possibilities of combinations of two variables</td><td>• Solve problems involving: relative sizes of two quantities; percentages; similar shapes; unequal sharing and grouping</td><td>• Use pie charts and line graphs to solve problems
• Calculate mean averages</td></tr>
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