

Abbey School - Maths Key Performance indicators.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place value and number	Count, read and write numbers to 100 in numerals (85%) Write numbers 1-20 in numerals and words. Understand the terms more, less and equals.	Knows the value of each digit in a two-digit number (100% accuracy) Can partition numbers to 100 in different ways (100% accuracy) Can partition same number showing different combinations (80% accuracy). Can compare and order numbers to 100 stating > and < (100% accuracy) Can count forwards and backwards in 10s up to 100 from any given number (100% accuracy)	Can write any number to 1,000 correctly. (100% accuracy) Can recognise the value of each digit in a three-digit number. (100% accuracy). Can read and write numbers to 1,000 in numerals and words and can convert from one form to the other.(100% accuracy). Can compare and order numbers to 1000 Knows 100 more and 100 less than any given number	Can compare and order numbers beyond 1000 and know the value of each digit in a 4 digit number. (100% accuracy) Can count forwards and backwards through zero including negative numbers (85% accuracy) Can round to the nearest 10, 100, 1000 and nearest whole number from 1DP (85% accuracy) Can multiply and divide by 10, 100 including to 1DP(85% accuracy)	Can read, write and compare numbers to at least 1,000,000(100% accuracy) Can understand the value of each digit up to 1,000,000(100% accuracy) Can round to nearest 10, 100, 1000(85% accuracy) Can multiply and divide whole numbers and decimals by 10, 100, 1000 Can read, write, order and compare decimals up to 2DP(85% accuracy)	Can identify the value of each digit in numbers up to 10, 000, 000 , including numbers which might involve the use of decimal fractions up to 3DP (90% accuracy) Can use negative numbers and can calculate across zero (90% accuracy)
Addition and subtraction	Read and write mathematical statements involving + and – (95% accuracy) Add and subtract one digit and 2 digit numbers to 20, including zero. (95%) accuracy.	Can use + and –to solve simple word problems (90% accuracy). Can use a range of strategies including mental strategies appropriately (85% accuracy). Knows number bonds to 20. Can use knowledge of number bonds to 100 to + and -. Can add up to 2 two-digit numbers and 3 one-digit numbers accurately using apparatus to explain their method (90% accuracy). Can subtract up to 2 two-digit numbers using apparatus to explain method where no regrouping is required (90% accuracy). Can recognise that + is the inverse of – (95% accuracy) Can use knowledge of inverse operations to check answer (75% accuracy). Can use commutativity of + (80% accuracy).	Can add and subtract ones, tens, hundreds to a three-digit number mentally (100% accuracy) Can add and subtract numbers up to three digits using column addition and subtraction and which do not involve regrouping (100% accuracy) Can begin to use column addition and subtraction when regrouping is required (70% accuracy). Can solve 1 step problems involving addition and subtraction (90% accuracy) Can use knowledge of inverse operations to check answer (90% accuracy).	Can add and subtract 3 digit numbers using formal written methods (100% accuracy) Can solve 2 step problems involving addition and subtraction (90% accuracy) Is beginning to choose when to use a mental or written calculation for speed or accuracy (85% accuracy)	Can add and subtract whole numbers with 4 digits or more using formal column methods (90% accuracy) Can add and subtract using mental methods choosing when it is appropriate and most efficient(90% accuracy) Can solve multi step problems choosing the correct methods(90% accuracy)	Can use addition and subtraction mentally and use formal written methods appropriately and accurately in formal calculations and in problems(100% accuracy) Estimate to check calculation (100% accuracy) Can solve multi step problems including choosing the correct method (85% accuracy)

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<p>Multiplication and division</p>	<p>Count in 1's, 2's, 5's and 10's. (100% accuracy)</p> <p>Solve one step problems for multiplication and division by grouping (80% accuracy)</p>	<p>Can recall x and division facts for 2,3,5,10 multiplication tables (100% accuracy)</p> <p>Can solve mathematical statements for x and division involving = sign (95% accuracy).</p> <p>Can solve simple problems involving x and division (80% accuracy)</p> <p>Can recognise the link between x, division,+ and – and can use a variety of methods (70% accuracy)</p> <p>Recognises the commutativity of x, but not division (40% accuracy).</p>	<p>Can x and divide using two and one-digit numbers mentally and using formal written methods. (100% accuracy) (Build up from grid/chunking methods)</p> <p>Can solve simple problems involving x and division (90% accuracy)</p> <p>Recognises the commutativity of x, but not division (60% accuracy).</p>	<p>Can choose the simplest mental strategy to multiply 3 numbers e.g. 4x5x2 (90% accuracy)</p> <p>Multiply and divide two and three digit numbers by a single digit number using formal written methods (Build up from grid/chunking methods)</p> <p>Can solve 2 step problems involving multiplication and division including distributive law e.g. $39 \times 7 = (30 \times 7) + (9 \times 7)$ (75% accuracy)</p>	<p>Can multiply 4 digits by 1 digit using formal written methods (100% accuracy)</p> <p>Can divide 4 digit by 1 digit and interpret remainders (90% accuracy)</p> <p>Can solve multi step problems choosing the correct method (80% accuracy)</p>	<p>Can multiply and divide up to 4 digit numbers by 2 digit numbers formally (80 % accuracy)</p> <p>Can multiply and divide mentally simplifying where appropriate (85% accuracy)</p> <p>Can multiply and divide multi step problems choosing the correct method (80% accuracy)</p>
<p>Fractions</p>	<p>Recognise, find and name half as one of two equal parts of an object, shape or quantity (100 % accuracy)</p> <p>Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity (100% accuracy)</p>	<p>Understands that a fraction is an equal part of a whole. (100% accuracy).</p> <p>Recognises half, third, quarter, two-quarters and three-quarters of a shape, set of objects or quantity (90% accuracy)</p> <p>Can find simple fraction of a number e.g. $\frac{1}{2}$ of 6 = 3 (70% accuracy).</p> <p>Can solve statements involving equivalent fractions (50% accuracy).</p> <p>Can use knowledge of fractions to solve simple problems (50% accuracy)</p>	<p>Can recognise, find and write fractions of a discrete set of objects (100% accuracy)</p> <p>Can order fractions on a number line including fractions with different denominators (half; quarter; third; tenth) (100% accuracy)</p> <p>Can add and subtract fractions with the same denominator (90% accuracy)</p> <p>Can show equivalent fractions using the same denominator. (90% accuracy)</p> <p>Can use knowledge of fractions to solve simple problems (75% accuracy)</p> <p>Can deduce relationship between unit and non-unit fractions on the number line beyond the (0,1) interval (70% accuracy)</p>	<p>Can show equivalent fractions on diagrams including common families(90% accuracy)</p> <p>Can recognise hundredths as divided by 100 and tenths divided by 10 (85% accuracy)</p> <p>Can solve problems to find fractions of a whole. (85% accuracy)</p> <p>Is beginning to find non unit fractions of amounts(75% accuracy)</p> <p>Can compare 2 numbers up to 2DP (85% accuracy)</p> <p>Can add and subtract fractions with the same denominator (100% accuracy)</p>	<p>Can compare and order fractions whose denominators are the same or multiples (85% accuracy)</p> <p>Can simplify fractions to their simplest form (85% accuracy)</p> <p>Can identify, name and write equivalent fractions including $\frac{1}{10}$ and $\frac{1}{1000}$ (85% accuracy)</p> <p>Can add and subtract fractions whose denominators are the same or multiples (100% accuracy)</p> <p>Can recognise and use mixed and improper fractions (85% accuracy)</p> <p>Can read and write fractions as decimals and percentages up to 2DP e.g. $\frac{71}{100}$ 71% 0.71 (85% accuracy)</p> <p>Can solve problems involving finding a percentage/fraction of a whole number 10% 25% 50% 75% $\frac{1}{2}$ $\frac{1}{10}$ $\frac{3}{4}$ (85% accuracy)</p>	<p>Understand the relationship between fractions, decimals and percentages including mixed numbers and express them in equivalent quantities (90% accuracy- This year 80%)</p> <p>Can order fractions expressed in different ways in ascending and descending order(85% accuracy- This year 75%)</p> <p>Can calculate (+ - \times \div) accurately using different types of fractions (85% accuracy- this year 65%)</p>

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<p>Geometry</p>	<p>Recognise and name 2D shapes (rectangles, square, circles and triangles) (100 % accuracy)</p> <p>Recognise and name 3D shapes (cuboids, cubes, pyramids and spheres) (100% accuracy)</p>	<p>Can name and identify 2-D (square; rectangle; triangle; circle) and 3-D shapes (cube; cuboid; prism; cylinder; cone). Can describe the properties of 2-D shapes (100% accuracy) and 3-D shapes (80% accuracy) – sides; vertices; faces; edges; corners; symmetry.</p> <p>Can compare shapes, identifying similarities and differences (70% accuracy).</p>	<p>Can name and describe the properties of 2-D and 3-D shapes using the appropriate vocabulary (vertex; faces; vertices; sides; edges; lines of symmetry; angles (acute; obtuse; right angle); horizontal; vertical; perpendicular; parallel) (80% accuracy)</p> <p>Can identify right angles and can identify right angles as part of a whole turn (100% accuracy)</p> <p>Can state whether angles are bigger or smaller than a right angle and can sort angles. (90% accuracy)</p> <p>Can estimate and measure the perimeter of 2-D shapes.</p> <p>Can compare measures including the use of scaling up.</p>	<p>Can name and classify quadrilaterals and triangles and describe their properties (85% accuracy)</p> <p>Can recognise and order acute and obtuse angles (90% accuracy)</p> <p>Can find lines of symmetry in 2D shapes (100% accuracy)</p> <p>Can describe position of a 2D shape as coordinates in the first quadrant (100% accuracy)</p>	<p>Knows the names and properties of all 2D and 3D shapes (100% accuracy)</p> <p>To recognise and name right angles, acute, obtuse, reflex and straight line angles (100% accuracy)</p> <p>Estimate angles and compare in terms of greater than and less than (100% accuracy)</p> <p>Can find missing angles on a straight line and triangle (75% accuracy)</p> <p>Can describe a position of a shape after a reflection and translation in lines parallel to the axes (85% accuracy)</p>	<p>Know names and properties of all 2D and 3D shapes (100% accuracy)</p> <p>Use knowledge of properties to solve calculations/problems accurately (85% accuracy) –This year 75%)</p>
<p>Measures</p>	<p>Knows units of measurements (capacity; mass; length; time) 80% accuracy</p> <p>Knows units of money (100% accuracy)</p> <p>To tell the analogue time to the hour and half past and draw hands on a clock face to show the given times. (100% accuracy)</p>	<p>Can read scales involving intervals of 2, 5,10 (90% accuracy)</p> <p>Knows units of measurements (capacity; mass; length; time; temperature) and can select appropriate unit for the task</p> <p>Knows units of money and can find different combinations of coins for a given amount (90% accuracy).</p> <p>Can measure and compare measurements (80% accuracy).</p> <p>Can count in intervals of 15 mins. (75% accuracy)</p> <p>Can sequence intervals of time (80% accuracy)</p> <p>Can read and write the time on digital and analogue clocks to the nearest 5 mins (70% accuracy).</p>	<p>Can measure length, mass, volume and money accurately, using the correct unit of measurement. (85% accuracy)</p> <p>Can compare, add and subtract different units of measurement. (95% accuracy)</p> <p>Can tell and write the time using analogue and digital cloaks and can begin to express time using the 12 and 24 hour clock. (85% accuracy)</p> <p>Knows vocabulary for time (second; minute; hour; o'clock; a.m/p.m. morning; afternoon; noon; midnight).</p> <p>Can estimate and read time to the nearest minute. (85% accuracy)</p>	<p>Can find the area of rectangular shapes by counting squares (100% accuracy)</p> <p>Can measure and calculate perimeter in m and cm (85% accuracy)</p> <p>Can estimate, compare and calculate different measures including £ and p (100% accuracy)</p> <p>Can read, write and convert analogue and digital time for 12 and 24 hour clock. (90% accuracy)</p>	<p>Can measure and calculate area and perimeter of rectangles and compound shapes (85% accuracy)</p> <p>Read, write and convert between analogue and digital clocks in both 12 and 24 hour clock (100% accuracy)</p> <p>Use all 4 operations to solve problems involving measure. (85% accuracy)</p>	<p>Can calculate the area of a parallelograms and triangles (90% accuracy – This year 75%)</p> <p>Can calculate and compare volumes of cubes and cuboids (80%- This year 60% accuracy)</p> <p>Use all 4 operations to solve problems involving measure. (95% accuracy)</p>

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Data handling	Can construct, interpret and predict data using block graphs, tally charts and pictograms (75% accuracy)	Can construct and interpret and predict data using block graphs, tally charts and pictograms. (85% accuracy)	Can interpret and predict data using bar charts, pictograms and tables. (100% accuracy) Pupils can read and use simple scales accurately (2,5, 10 units per cm) (100% accuracy) Can solve problems using information in a bar charts, tally charts, tables and pictograms (70% accuracy)	Can insert and interpret data using bar charts, tally, venn and carroll diagrams and pictographs Can solve problems using information in a bar charts, tally charts, tables and pictograms (80% accuracy)	Read and interpret information in tables and graphs including timetables and line graphs Can solve problems using information in a bar charts, tally charts, tables and pictograms, line graphs and timetables (90% accuracy)	Can interpret a range of pie charts and graphs accurately involving different scales Can use the information to solve problems (85% accuracy- This year 65%)
Mathematical reasoning	Can explain their methods using apparatus to show informal methods, to show their understanding (50% accuracy) Solve addition and subtraction missing number problems (60% accuracy)	Can explain their methods using apparatus to show informal methods, to show their understanding and can give reasons (60% accuracy) Can solve missing number problems across the 4 operations (40% accuracy) Uses inverse operations to check answers to +; -; x; division. Can solve simple 2-step problems (40% accuracy). Can estimate and explain their methods (70% accuracy).	Can solve simple problems involving +; -; x; division in different contexts, deciding which of the four operations to use, including simple correspondence problems (80% accuracy) Can use knowledge of time to compare duration of events. Can solve simple 2-step problems (75% accuracy). Can estimate and explain their methods (85% accuracy).	Can select key information from a problem and choose the correct calculation to solve it. (75% accuracy) Can solve questions involving mathematical reasoning and explain their answers	Can select key information from a problem and choose the correct calculation to solve it. Can solve questions involving mathematical reasoning and explain their answers	Can understand questions including key vocabulary and recognise the mathematical skills, knowledge and understanding that are needed in the question (85% accuracy- This year 65%) Can make links between different areas of maths and can identify the most appropriate operation to use (85% accuracy- This year 65%) Can solve questions involving mathematical reasoning and explain their answers (85% accuracy- This year 65%)
Recall of facts	Number bonds to 20. (80% accuracy) Double and halves to 20 (100% accuracy) Knows units of measurement including time and money (70% accuracy)	Knows doubles and halves of numbers to 20; 100 (10's) (100% accuracy). Knows number bonds to 20; to 100 using 10's (100% accuracy). Knows 2, 3,5,10 multiplication tables (90% accuracy). Knows units of measurement including time and money (80% accuracy). Can identify odd and even numbers (100% accuracy).	100% accuracy in Year 3 Maths Passport Knows 3,4,8 tables (90% accuracy). Can count in tenths (70% accuracy). Knows seconds in a minute; days in a week/months; year and leap year (90% accuracy). Knows units of measurement including time and money (100% accuracy).	Can identify equivalent decimals for $\frac{1}{2}$ $\frac{1}{4}$ and tenths and hundredths (85% accuracy). Can recall multiplication and division facts up to X10 with developing confidence (90% accuracy) Can recall equivalence in units of measure e.g. minutes/hours, cm/mm, cm/m, ml/l,	Recall all multiplication and division facts up to X10 speedily and accurately (95% accuracy). Can recall multiples, factors, square numbers Can name prime numbers up to 20 (85% accuracy). Can recall number bonds to 10, 100, 1 e.g. $0.81 + 0.19$ (95% accuracy). Can recall equivalent units of measure e.g. $1\text{kg} = 1000\text{g}$ $60\text{ minutes} = 1\text{ hour}$ etc. (100% accuracy).	Can recall multiplication tables accurately and speedily (100% accuracy) Can recall doubles and halves of any number to 100 speedily (100% accuracy) Can recall number bonds to 10, 20, 100, 1000 (100% accuracy) Can recall equivalent fractions, decimals, percentages (95% accuracy) Can recall equivalent

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	<p>Can identify odd and even numbers (90% accuracy)</p>			<p>months/years, minutes/seconds, weeks/days (90% accuracy)</p>	<p>Can recall facts associated with shapes e.g. 180 degrees in a triangle and on a straight line, (85% accuracy).</p> <p>To know and understand key vocabulary and symbols- %, = as a balance</p>	<p>units of measure (95% accuracy) Can recall common factors, multiples and prime numbers up to 100 (95% accuracy) Understand mode, mean and median(95% accuracy) To know and understand key vocabulary- difference, perpendicular, Parallel, Digit formula, value, intervals, measures, share equally, compare, altogether</p>
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