

Year 4

Topics	Syllabus
Year 4 (Ages 8-9)	
1 Whole Numbers	
Numbers up to 100 000	Include: <ul style="list-style-type: none">• number notation and place values (ten thousands, thousands, hundreds, tens, ones),• reading and writing numbers in numerals and in words,• comparing and ordering numbers,• number patterns,• rounding off numbers to the nearest 10 or 100,• use of the approximation symbol (\approx).
Multiplication and division	Include: <ul style="list-style-type: none">• multiplication of a 4-digit number by a 1-digit number,• multiplication of a 3-digit number by a 2-digit number,• division of a 4-digit number by a 1-digit number,• solving up to 3-step word problems involving the 4 operations,• estimation of answers in calculations involving the 4 operations,• checking reasonableness of answers.
Factors and multiples	Include: <ul style="list-style-type: none">• determining if a 1-digit number is a factor of a given number,• listing all factors of a given number up to 100,• finding the common factors of two given numbers,• recognising the relationship between factor and multiple,• determining if a number is a multiple of a given 1-digit number,• listing the first 12 multiples of a given 1-digit number,• finding the common multiples of two given 1-digit numbers. Exclude 'highest common factor' (H.C.F.) and 'lowest common multiple' (L.C.M.).
2 FRACTIONS	
Mixed numbers and improper fractions	Include: <ul style="list-style-type: none">• concepts of mixed numbers and improper fractions,• expressing an improper fraction as a mixed number, and vice versa,• expressing an improper fraction/mixed number in its simplest form. (Denominators of given fractions should not exceed 12.)

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Addition and subtraction	Include addition and subtraction of <ul style="list-style-type: none"> * like fractions, * related fractions. (Denominators of given fractions should not exceed 12.) Exclude calculations involving more than 2 different denominators.
Fraction of a set of objects	Include interpretation of fraction as part of a set of objects.
Multiplication	Include: <ul style="list-style-type: none"> • multiplication of a proper/improper fraction and a whole number, • solving up to 2-step word problems involving addition, subtraction and multiplication, • using unitary method to find the whole given a fractional part.
3 DECIMALS	
Decimals up to 3 decimal places	Include: <ul style="list-style-type: none"> • notation and place values (tenths, hundredths, thousandths), • identifying the values of the digits in a decimal, • use of the number line to display decimals, • comparing and ordering decimals, • conversion of a decimal to a fraction, • conversion of a fraction whose denominator is a factor of 10 or 100 to a decimal, • rounding off decimals to <ul style="list-style-type: none"> * the nearest whole number, * 1 decimal place, * 2 decimal places.
Addition and subtraction	Include: <ul style="list-style-type: none"> • addition and subtraction of decimals (up to 2 decimal places), • estimation of answers in calculations, • checking reasonableness of answers.

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Multiplication and division	Include: <ul style="list-style-type: none"> • division of a whole number by a whole number with answer in decimal form, • multiplication and division of decimals (up to 2 decimal places) by a 1-digit whole number, • solving up to 2-step word problems involving the 4 operations, • rounding off answers to a specified degree of accuracy, • estimation of answers in calculations, • checking reasonableness of answers.
4 MEASUREMENT	
Time	Include: <ul style="list-style-type: none"> • measurement of time in seconds (s), • 24-hour clock, • solving word problems involving time in 24-hour clock.
Money	Include: <ul style="list-style-type: none"> • multiplication and division of money in decimal notation, • solving word problems involving the 4 operations of money in decimal notation.
Area and perimeter	Include: <ul style="list-style-type: none"> • finding the area of a composite figure made up of rectangles and squares, • finding one dimension of a rectangle given the other dimension and its area/ perimeter, • finding the length of one side of a square given its area/ perimeter, • solving word problems involving the area/ perimeter of squares and rectangles. Exclude use of the symbol $\sqrt{\quad}$.
5 GEOMETRY	
Perpendicular and parallel lines	Include: <ul style="list-style-type: none"> • drawing of perpendicular and parallel lines using ruler and set squares, • use of the terms 'vertical' and 'horizontal'.

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Angles	<p>Include:</p> <ul style="list-style-type: none"> • using notation such as $\angle ABC$ and $\angle x$ to name angles, • estimation and measurement of angles in degrees, • drawing an angle using a protractor, • associating <ul style="list-style-type: none"> $\frac{1}{4}$ turn/ right angle with 90° $\frac{1}{2}$ turn with 180° $\frac{3}{4}$ turn with 270° a complete turn with 360° • 8-point compass. <p>Exclude:</p> <ul style="list-style-type: none"> • drawing and measuring reflex angles, • use of the notation x°.
Rectangle and square	<p>Include:</p> <ul style="list-style-type: none"> • properties of rectangle and square, • finding unknown angles. <p>Exclude:</p> <ul style="list-style-type: none"> • the term 'diagonal' and its related properties, • finding angles involving additional construction of lines.
Symmetry	<p>Include:</p> <ul style="list-style-type: none"> • identifying symmetric figures, • determining whether a straight line is a line of symmetry of a symmetric figure, • completing a symmetric figure with respect to a given horizontal/vertical line of symmetry, • designing and making patterns. <p>Exclude:</p> <ul style="list-style-type: none"> • finding the number of lines of symmetry of a symmetric figure, • rotational symmetry.
Tessellation	<p>Include:</p> <ul style="list-style-type: none"> • recognising shapes that can tessellate, • identifying the unit shape in a tessellation, • making different tessellations with a given shape, • drawing a tessellation on dot paper, • designing and making patterns.

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6 DATA ANALYSIS	
Tables	Include: <ul style="list-style-type: none"> • completing a table from given data, • reading and interpreting tables, • solving problems using information presented in tables.
Line graphs	Include: <ul style="list-style-type: none"> • reading and interpreting line graphs, • solving problems using information presented in line graphs. Exclude the distance-time graph.

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