

| Topics                               | FS2   | Year 1  | Year 2  | Year 3  | Year 4  | Year 5  | Year 6  | Year 7   | Year 8  | Year 9  |
|--------------------------------------|---|---|---|---|---|---|---|--|---|---|
| <b>Number &amp; Place Value</b>      | Explore quantity to 10; subitise to 3; count, compare and order small sets; link numerals to quantities; talk about "more than/fewer than".   | Count to and across 100; read/write numbers to 100; identify 1 more/less; count in 2s, 5s, 10s.   | Place value in 2-digit numbers; tens and ones; count to 100 from any number; locate numbers on number line; compare/order to 100.                 | Place value in 3-digit numbers; count in 4, 8, 50, 100; 10/100 more or less; order and compare to 1000.   | Place value in 4-digit numbers; count in 1000s; 1/10/100/1000 more or less; order and round numbers to 10 000.                            | Read/write/order numbers to 1 000 000; powers of 10; negative numbers introduced in context; round to nearest 10–100 000.   | Read/write/order numbers to 10 000 000; negative numbers through zero; round to any degree of accuracy; use number lines and powers of 10.                      | Place value for integers and decimals; factors, multiples and primes; rounding and estimation; powers and roots; work on directed numbers.   | Consolidate large integers and decimals; index notation; rounding to significant figures; standard form (intro); real number line including negative numbers.                   | Fluent place value with integers, decimals and standard form; exact values with surds (optional); error intervals and bounds; prime factorisation and indices.                          |
| <b>Curriculum Adaptation</b>         | Use concrete manipulatives (cubes, counters, bead-strings, tens frames).<br><br>Bilingual number mats (١ ← ١ and 1–10).<br><br>Counting songs in English and Arabic.<br><br>Visual number lines displayed permanently.<br><br>EAL scaffolds: "Show me ____", "What comes before/after ____?".<br><br>ALN: tactile resources, enlarged number cards, colour-coded tens/ones. |   |   | Use Dienes blocks, place-value charts, arrow cards.<br><br>Pre-teach vocabulary with bilingual flashcards.<br><br>Provide sentence frames:<br><br>"The value of this digit is ____."<br><br>"This number is greater/smaller because..."<br><br>Real UAE contexts: bus numbers, building floors, money in AED.<br><br>Tiered tasks: concrete → pictorial → abstract. |   |   |   | Bilingual glossary for integers, decimals, powers, indices.<br><br>Scaffolded worked examples before independent tasks.<br><br>ALN adaptation: "cloze" examples, structured steps.<br><br>Extension: standard form linked to UAE population, finance, distances. |   |   |
| <b>Addition &amp; Subtraction</b>    | Combine and partition small sets; real-life adding/taking away; "one more/one less"; explore number stories to 5 and 10.  | Number bonds within 10 and to 20; add/subtract 1- and 2-digit numbers within 20; simple missing-number problems and equations with +, −, =. | Secure bonds within 10; add/subtract 2-digit numbers within 100 (mental and written); add/subtract 10s; use number lines; two-step word problems. | Add/subtract 3-digit numbers using formal column methods; complements to 100; use inverse; solve money and measure problems.  | Column addition and subtraction with up to 4-digit numbers; efficient mental strategies; multi-step word problems.                        | Column methods with numbers >5digits; mental strategies; use of rounding/estimation to check; multi-step contextual problems.                                       | Column methods with numbers >6 digits. Multi-step problems using all operations; choosing efficient methods; use of order of operations as preparation for KS3. | Extend written and mental methods to larger integers and decimals; introduction of algebraic representations of sums and differences; solving multi-step word problems.  | Secure fluency with integers and decimals; use of efficient strategies and calculator methods; start solving linear equations emerging from add/subtract contexts.              | Complex multi-step problems; algebraic manipulation underpinning equations and inequalities; work with exact values and surds in contexts.  |
| <b>Curriculum Adaptation</b>         | Use hands-on addition (counters, objects, cubes).<br><br>Ten-frame addition and subtraction.<br><br>Use stories relatable in the UAE ("I had 5 dates and ate 2...").<br><br>Bilingual symbols (+, −, = labelled in Arabic/English).   |   |   | Scaffold column addition/subtraction with colour-coded place-value columns.<br><br>Provide structured steps for regrouping.<br><br>UAE-relevant word problems (shopping in AED, distances in km).<br><br>EAL support: operation cue cards.  |   |   |   | Reinforce negative number operations with number lines.<br><br>Guided examples for multi-step equations.<br><br>Use real-life contexts (money exchange, temperature differences).<br><br>HA: algebraic addition/subtraction.                                     |   |   |
| <b>Multiplication &amp; Division</b> | Make equal groups in play; share objects; repeated patterns of counting in 2s/5s; early language of "lots of, groups of, share, half".  | Count in 2s, 5s, 10s; recall related facts; use arrays; one-step word problems with concrete/pictorial support.                             | Introduce × and ÷ symbols; 2, 5, 10 tables; repeated addition; grouping and sharing; division as inverse of multiplication.                       | 3, 4, 8 tables; × and ÷ of 2- and 3-digit numbers by 1-digit using informal and formal methods; scaling and correspondence problems.  | Recall all tables to 12×12; factor pairs; multiply/divide by 10 and 100; short multiplication; divide 2-digit by 1-digit with remainders. | Multiply and divide by 10, 100, 1000; multiply 4-digit by 1-digit using formal methods; short division with remainders; factors, multiples, primes, squares, cubes. | Long multiplication up to 4-digit × 2-digit; long and short division with 2-digit divisors; interpret remainders; apply four operations in multi-step problems. | Fluent integer/decimal multiplication and division; use of prime factorisation and indices; operations with powers; begin work with fractional and algebraic multiplication.   | Develop non-calculator and calculator strategies; expand and factorise expressions via distributive law; work with integer powers and roots; compound growth and rate problems. | Extend to more complex products and quotients including algebraic; solve problems involving proportional change; formal use of index laws and standard form in multiplicative contexts. |

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| <b>Curriculum Adaptation</b> | <p>Grouping and sharing with concrete objects.</p> <p>Arrays with counters and pictures.</p> <p>Skip counting songs (2s, 5s, 10s).</p> <p>Bilingual support on multiplication tables.</p> |   |  | <p>Use equal groups, bar modelling, number lines.</p> <p>Multiplication chart bilingual wall display.</p> <p>ALN: colour-coded multiplication facts, repeated addition first.</p> <p>Real-life UAE links: sharing food, grouping items, equal parts.</p> |  |  |   | <p>Scaffold long multiplication and division steps.</p> <p>Prime factorisation using colour-coded trees.</p> <p>Use calculator/non-calculator practice proportionately.</p> <p>HA: algebraic multiplication, indices, factorisation.</p> |   |  |
| <b>Fractions</b>             | Share objects into equal parts (halves, then quarters); talk about “fair shares”; simple part-whole language.   | Recognise and find $\frac{1}{2}$ and $\frac{1}{4}$ of shapes and small sets; begin to see fraction as equal parts of a whole. | Recognise, find and write unit and simple non-unit fractions of shapes/sets; fractions on number line; $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ , $\frac{3}{4}$ . | Recognise and write unit and non-unit fractions; place fractions on number line; find fractions of quantities using known facts; add/subtract fractions with same denominator within 1.  | Count in tenths and hundredths; equivalent fractions; compare/order fractions with same denominator; add/subtract with same denominator; mixed and improper fractions. | Compare/order fractions with related denominators; recognise and use mixed and improper fractions; add/subtract fractions with same denominator and multiples; multiply proper fractions and mixed numbers by whole numbers. | Simplify fractions using common factors; compare/order fractions (incl. $>1$ ) by reasoning and common denominators; add/subtract with different denominators; multiply and divide fractions by integers and other fractions. | Extend to all rational numbers; operate with fractions, including improper and mixed; recurring decimals and fraction equivalence; fraction arithmetic in algebraic contexts.  | Work with rational numbers in more complex problems; algebraic fractions (simple cases); develop links between ratio, fractions and percentage. | Secure fluency with fractions and mixed numbers, including algebraic fractions; use in equations, similarity, trigonometry and probability contexts. |
| <b>Curriculum Adaptation</b> | <p>Use pizzas, dates, circles, and Arabic sweets for halves/quarters.</p> <p>Folded paper fractions.</p> <p>Use visual cutouts before symbols.</p>  |   |  | <p>Bar models, fraction walls, number lines.</p> <p>Tiered tasks: match → order → calculate.</p> <p>EAL: fraction sentence frames (“___ is bigger because...”).</p> <p>UAE contexts: recipe fractions, dividing money.</p>                               |  |  |   | <p>Scaffolded conversion between fractions/decimals/percentages.</p> <p>Chunked steps for fraction operations.</p> <p>HA: algebraic fractions.</p>   |   |  |
| <b>Decimals</b>              | Early experiences comparing length/weight/capacity through language (no formal decimals).   | -   | -  | Read and write simple tenths in context (measures, money).   | Tenths and hundredths as decimals; compare and round to 1 decimal place.   | Read, write, compare and round decimals with 2 decimal places; link to fractions ( $\frac{1}{10}$ , $\frac{1}{100}$ ); place value to hundredths.  | Read, write, order and compare numbers with up to 3 decimal places; connect decimals to fraction and measure contexts.  | Consolidate decimal place value; operations with decimals (all four operations); recurring decimals; links to proportion and graphs.   | Work confidently with decimals in standard form, bounds and percentage problems; exact vs rounded values.                                       | Apply decimals widely in algebra, geometry (trig) and statistics; use calculators efficiently while maintaining estimation skills.                   |
| <b>Curriculum Adaptation</b> | Introduce informally through money (AED).   |   |  | <p>Place-value grids for tenths/hundredths.</p> <p>Use money in AED (1.25 AED, 3.50 AED).</p> <p>Bilingual decimal charts.</p>   |  |  |   | <p>Structured steps for rounding and operations.</p> <p>Link decimals to measurement (km, L, kg).</p> <p>HA: problem solving / standard form.</p>  |   |  |
| <b>Percentages</b>           | -   | -   | -  | -  | Introduce simple equivalences ( $\frac{1}{2} = 50\%$ , $\frac{1}{4} = 25\%$ ) informally.  | Recognise % as “per hundred”; convert between simple fractions, decimals and percentages; percentage of quantities in simple cases.  | Percentage of amounts including multi-step problems; link percentage change to ratio and decimals.  | Percentage of quantities; increase/decrease; compound change (intro); financial contexts such as profit/discount.  | More complex % problems; reverse percentages; repeated change; link to algebraic multipliers.   | Full GCSE-style work: percentage equations, growth and decay, compound interest, repeated reductions; connection to probability and statistics.      |
| <b>Curriculum Adaptation</b> | Not introduced formally; visuals only (half = 50%).   |   |  | <p>Link percentages to real UAE contexts: discounts, VAT, sale signs.</p> <p>Bilingual fraction–decimal–percentage chart.</p>  |  |  |   | <p>Scaffold multi-step percentage problems.</p> <p>HA: reverse percentages, compound change.</p>   |   |  |

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| <b>Ratio &amp; Proportion</b>                            | -  | -  | -  | -  | -  | Use vocabulary of proportion informally in measures and scaling problems.   | Solve ratio problems, including unequal sharing and scaling; link to fractions and percentages; use of ratio notation and word-symbol connection.                                    | Use direct proportion, unitary method; interpret graphs and tables in proportional situations; begin inverse proportion qualitatively.             | Solve ratio and proportion problems algebraically; scale diagrams and maps; work with direct and inverse proportion.  | Complex proportional reasoning including changing ratios, mixtures, best-value problems and links to similarity, trigonometry and probability.                |
| <b>Curriculum Adaptation</b>                             | Simple “more/less” comparisons.  |  |  | Recipes, mixtures, pictorial models.<br><br>UAE examples: juice recipes, class groups.   |  |   |  | Scaffold unitary method.<br><br>Bilingual bar-proportion charts.<br><br>HA: ratio algebra, scale models, maps.                                     |   |   |
| <b>Algebra</b>   | Notice patterns in counting and shape; talk about “what comes next” in simple sequences.   | Missing-number problems with + and – as early algebraic thinking.  | Missing-number and simple two-step problems; function-machine style reasoning.   | Use inverse operations and number patterns to generalise; simple “n + 10” style rules.   | Use formulae in measure (area, perimeter); explore number sequences and patterns.                        | Use simple algebraic notation ( $n$ , $2n$ , $n^2$ ); express and evaluate simple formulae; generate linear sequences.  | Formally use algebra: expressions, simplifying, substitution; solve 1-step and 2-step linear equations; use formulae; coordinate work.   | Extend to simultaneous equations, inequalities, linear graphs, basic quadratics; real-life modelling.  | Work with more complex algebraic manipulation (factorising quadratics, solving quadratic equations), sequences (including $n$ th term), simultaneous equations (two variables). | Introduce further techniques as needed for GCSE: non-linear graphs, functions, more advanced sequences, and algebraic proof.                                  |
| <b>Curriculum Adaptation</b>                             | Patterns and sequences; shapes and colours.  |  |  | Number patterns with bilingual vocabulary.<br><br>Missing numbers using frames.  |  |   |  | Step-by-step solving with worked examples.<br><br>Graphic organisers for equations/inequalities.<br><br>HA: quadratics and simultaneous equations. |   |   |
| <b>Measurement (Length, Mass, Capacity, Time, Money)</b> | Compare length, weight, capacity directly; use everyday language (bigger, shorter, heavier, full); explore time in routines (“now, next”).   | Compare, describe and solve problems for length, mass, capacity/volume and time; use non-standard units and begin standard units; recognise coins and notes. | Use standard units (m, cm, kg, g, l, ml); compare and order; four operations with money; tell and write time to 5 minutes; simple durations. | Measure, compare, add and subtract using standard units; perimeter; analogue time including 24-hour; durations and simple timetable problems.    | Convert between units of measure; perimeter of rectilinear shapes; area; time problems using timetables. | Convert between metric units and between metric and common imperial; estimate, compare and calculate perimeter and area (including triangles/parallelograms); volume (cubes/cuboids). | Use, read, write and convert between standard units using decimal notation; solve problems involving perimeter, area (including triangles/parallelograms) and volume; scale factors. | Use compound measures (speed, density, unit price); convert between and compare units; complex time, money and metric/imperial conversions.        | Extend work with compound measures; circle mensuration (intro in geometry but linked); growth and scale problems.   | Apply measures across geometry and statistics (surface area, volume, kinematics); interpret and construct scale drawings and graphs of measure relationships. |
| <b>Curriculum Adaptation</b>                             | Non-standard units (blocks, hands).<br><br>UAE everyday contexts (temperature, water bottles).<br><br>Bilingual rulers and vocabulary cards. |  |  | Scaffold unit conversions.<br><br>Use real tools: measuring cylinders, thermometers.<br><br>UAE contexts: distances between cities, money (AED). |  |   |  | Compound measures (speed, density) with structured steps.<br><br>HA: complex conversions and real data.  |   |   |

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| <b>Geometry: Properties of Shapes</b>  | Explore 2D and 3D shapes; talk about sides, corners, round/straight ; build with shapes; compose/dec compose shapes.       | Recognise and name common 2D and 3D shapes; describe using simple language (sides, corners).       | Identify and describe properties of 2D and 3D shapes; line of symmetry in a vertical line; sort shapes using properties. | Draw 2D shapes accurately; recognise angles as properties of a shape; identify right angles and compare others.   | Compare and classify 2D/3D shapes; identify acute, obtuse and right angles; symmetry in 2D shapes. | Identify 3D shapes from 2D representations; measure and draw angles; properties of triangles and quadrilaterals; regular polygons. | Draw and measure angles accurately; classify shapes by properties; find unknown angles in triangles, quadrilaterals and at a point/on a straight line. | Classify and construct more complex polygons; angle reasoning in parallel lines and polygons; introduce circle terminology.        | Explore congruence and similarity; interior and exterior angles of polygons; circle properties (radius, diameter, circumference ). | Full angle work with polygons; Pythagoras and trigonometry (right-angled); more detailed circle theorems (if offered); similarity and congruence in more formal contexts. |
| <b>Curriculum Adaptation</b>   | Manipulatives: 2D/3D shapes, puzzles, construction toys.<br><br>Bilingual shape posters.                                   |  |  | Scaffold angle measurement and drawing.<br><br>Pre-drawn shapes for ALN; deeper reasoning for HA.<br><br>UAE connections: architecture (mosques, towers). |  |  |  | Guided steps for transformations, nets, coordinates.<br><br>HA: Pythagoras, trigonometry contexts.                                 |  |   |
| <b>Geometry: Position &amp; Direction (including Coordinate Geometry, Transformations)</b> | Use positional language (in, on, under, next to, behind, in front of); follow simple routes.                               | Describe position, direction and movement (quarter, half, three-quarter turns).                    | Describe position on a grid with rows/columns ; simple movement and turns.   | Use coordinates in first quadrant; describe translations; recognise horizontal and vertical.  | Coordinates in all four quadrants (intro); describe and plot translations and reflections.         | Use all four quadrants; reflect and translate shapes on coordinate grid.   | Consolidate coordinates and transformations; link to algebraic graphs; scale factors for enlargements (pre-similarity).                                | Work with straight-line graphs; gradient and intercept; transformations (reflect, rotate, translate, enlarge) in all quadrants.    | Extend coordinate geometry: parallel/perpendicular lines; midpoints; transformations with vectors.                                 | Use graphs in more complex contexts (simultaneous equations, distance–time, velocity–time); combine transformations; coordinate proofs (if offered).                      |
| <b>Curriculum Adaptation</b>   | Manipulatives: 2D/3D shapes, puzzles, construction toys.<br><br>Bilingual shape posters.                                   |  |  | Scaffold angle measurement and drawing.<br><br>Pre-drawn shapes for ALN; deeper reasoning for HA.<br><br>UAE connections: architecture (mosques, towers). |  |  |  | Guided steps for transformations, nets, coordinates.<br><br>HA: Pythagoras, trigonometry contexts.                                 |  |   |
| <b>Statistics</b>  | Sort and compare objects; talk about “how many” in each group; simple pictorial tallies.                                   | Interpret and create simple pictograms, tally charts and block diagrams; ask and answer questions. | Draw and interpret pictograms, tally charts, block diagrams and simple tables; compare totals and differences.           | Bar charts, pictograms and tables; answer questions using data; introduce scale on axes.  | Discrete data using bar charts and time graphs; compare data sets.                                 | Interpret and compare tables, line graphs; begin to solve two-step problems using data.  | Use line graphs and pie charts; calculate the mean as average; interpret complex discrete and continuous data.   | Collect, organise and display data (bar charts, pie charts, line graphs); introduce averages (mean, median, mode) and range.       | Compare distributions using averages and range; construct and interpret scatter graphs; correlation (informal).                    | Work with grouped data, histograms (if offered), box plots; two-way tables; more formal comparison of data sets and correlation.  |
| <b>Curriculum Adaptation</b>   | Sorting objects & simple pictograms.<br><br>Bilingual titles (“more/أكثر”, “less/أقل”).                                    |  |  | Scaffolded bar charts, tables, tally codes.<br><br>UAE contexts: weather, class surveys, traffic.   |  |  |  | Step-by-step graph plotting.<br><br>ALN: partially completed tables.<br><br>HA: scatter graphs, averages, box plots (if needed).   |  |   |
| <b>Probability</b>   | Experience chance informally in play (“it might rain”, “maybe”); language of certain/possible/impossible in everyday talk. | Talk about events that will/won’t happen without formal measures.                                  | -  | -   | -  | -  | Informal use when discussing outcomes and fairness in games.   | Introduce probability language (certain, likely, unlikely, impossible); simple equally likely outcomes; fractions for probability. | More formal probability on number line 0–1; combined events using sample space diagrams (simple cases).                            | Mutually exclusive and combined events; relative frequency; more complex sample spaces; link probability to fractions, decimals and percentages.                          |
| <b>Curriculum Adaptation</b>   | Simple verbal comparisons: “maybe”, “always”, “never”.   |  |  | Not formally introduced; basic ideas through games.   |  |  |  | Scaffold sample spaces, probability line, events.<br><br>HA: independent/dependent events.   |  |   |