CELT Maths Curriculum 2026 – 2027 | Year 9 Autumn Term

Module	What will learners learn?	How does this build a strong foundation?	Links to other subjects
Analysing Data 2	Learners compare averages, range, quartiles and interquartile range. Pathway depth includes grouped-data estimates, box plots and reverse-mean problems.	Builds on Year 7 statistics. Comparing typical values and spread supports cumulative frequency and evaluation of statistical conclusions.	• Geography: compare fieldwork data. • Science: analyse variation in results.
Expressions, Functions and Formulae 4	Learners form and simplify expressions and expand single and double brackets. Further depth includes special products, cubic expressions and algebraic proof.	Consolidates directed number and Year 8 expansion. Prepares learners for factorising, quadratic graphs and reasoning with equivalent expressions.	• Design and Technology: dimensions and areas. • Computing: algebraic calculations.
Percentages 2	Learners calculate percentage change and original amounts, simple and compound interest, growth and decay. Further depth includes successive and iterative changes.	Extends Year 8 percentages and multipliers. Distinguishing one-off and repeated change supports financial decisions and future growth models.	• PSHE: borrowing and savings. • Science: growth and decay.
Expressions, Functions and Formulae 5	Learners factorise expressions into single brackets and quadratics into two brackets. Further depth includes special quadratic forms and completing the square.	Connects common factors with expanding brackets. Equivalent forms support finding quadratic roots and simplifying algebraic fractions.	• Design and Technology: equivalent expressions for areas.
Enlargement and Reflections	Learners perform and describe enlargements and reflections, and explore symmetry. Further depth includes negative scale factors and combined transformations.	Builds on Year 8 transformations and proportion. Prepares learners for similarity, scale drawings and geometric reasoning.	• Art: symmetry and pattern. • Design and Technology: scale drawings.
Algebraic Graphs 2 (continues in Spring)	Learners plot quadratic graphs and identify roots and turning points, linking to factorisation. Further depth includes cubic, reciprocal and exponential graphs.	Extends Year 8 linear graphs and substitution. Connects graphical and algebraic representations for solving equations and modelling relationships.	• Science: relationships between variables. • Computing: plotting functions.

CELT Maths Curriculum 2026 – 2027 | Year 9 Spring Term

Module	What will learners learn?	How does this build a strong foundation?	Links to other subjects
Representing Data 2	Learners select and interpret data representations. Depending on pathway, they consolidate pie charts, frequency polygons and scatter graphs, or develop time series, cumulative frequency and box plots.	Connects earlier data handling with averages, quartiles and proportion. Selecting suitable representations strengthens statistical interpretation and judgement.	• Geography: trends and survey data. • Science: relationships and predictions. • PSHE: evaluate graphical claims.
Polygon Geometry	Learners classify polygons and derive interior-angle sums using triangles. They apply interior and exterior angle rules to find missing angles, including problems with combined shapes.	Extends Year 7 and Year 8 angle facts. Deriving rules and explaining solutions prepares learners for geometric proof and complex angle problems.	• Art: tessellations and geometric designs. • Design and Technology: angles in structures.
Indices and Standard Form	Learners apply index laws and represent and calculate with very large and very small numbers in standard form. Further depth combines index laws with non-unit fractional indices.	Builds on Year 8 powers, roots and reciprocals. Supports accurate calculation across scales and prepares learners for more complex algebra.	• Science: microscopic and astronomical quantities. • Geography: large-scale measurements. • Computing: data quantities.
Probability 2	Learners list outcomes and sample spaces, calculate expected frequencies and compare theoretical with experimental probability. They use relative frequency to make predictions.	Extends Year 7 probability using fractions and proportional reasoning. Prepares learners for combined events and evaluating predictions from experimental evidence.	• Science: repeated trials and predictions. • PSHE: chance and risk. • Computing: random simulations.

CELT Maths Curriculum 2026 – 2027 | Year 9 Summer Term

Module	What will learners learn?	How does this build a strong foundation?	Links to other subjects
Multiples, Factors and Roots	Learners consolidate powers, roots, prime factorisation, highest common factors and lowest common multiples. Further depth includes simplifying and calculating with surds, with rationalising denominators in selected pathways.	Strengthens number structure for fractions and algebra. Exact root representations support later Pythagoras, trigonometry and quadratic solutions.	• Design and Technology: repeated lengths and patterns. • Computing: prime factors in number-based algorithms.
Numerical and Algebraic Fractions and Equations	Learners calculate with numerical fractions, simplify algebraic fractions and solve linear equations involving fractions. Further depth includes algebraic fraction operations, factorisation and more complex fractional equations.	Connects fraction arithmetic, factorising and equation solving. Builds fluency for later algebraic fractions, rearranging formulae and complex equations.	• Science: calculations and formulae involving division. • Food Technology: fractional quantities. • Design and Technology: proportional dimensions.
Surface Area	Learners distinguish volume from surface area and calculate both for cubes, cuboids and triangular prisms. Depending on pathway, this extends to other prisms, cylinders and reverse problems.	Builds on Year 8 area, volume and circles. Summing face areas develops visualisation and prepares learners for composite solids and more complex measurements.	• Design and Technology: packaging and material quantities. • Science: surface area and volume in context.
Proportion 1	Learners distinguish direct and inverse proportion and solve problems in context. They select appropriate methods; further depth links proportional relationships to graphs.	Builds on ratio, multipliers and rates. Prepares learners for similarity, compound measures and algebraic models of proportion.	• Food Technology: scale ingredient quantities. • Science: proportional relationships. • Geography: scale and measurement.