CELT Maths Curriculum 2026 – 2027 | Year 10 Foundation Autumn Term

Module	What will learners learn?	How does this build a strong foundation?	Links to other subjects
Pythagoras, Angles and Trigonometry	Learners use Pythagoras to find missing lengths and solve problems. Target consolidates angle facts in shapes and parallel lines. Core also applies sine, cosine and tangent in right-angled triangles.	Builds on squares, roots and angle facts. Connects numerical calculation with geometry, preparing learners for measurement and problems involving several steps.	• Design and Technology: diagonal lengths. • Geography: slopes and distances.
Linear and Quadratic Equations	Learners form and solve linear equations, including brackets and unknowns on both sides. Core also revisits quadratic graphs and factorisation to solve quadratic equations and interpret their roots.	Builds on algebraic manipulation and inverse operations. Prepares learners for simultaneous equations and finding unknown quantities from geometric or practical information.	• Science: calculate unknowns in formulae. • Design and Technology: unknown dimensions.
Circles 2	Learners calculate areas and perimeters involving whole circles, simple sectors and compound shapes. Core also finds a radius or diameter from a given area or circumference.	Connects circle formulae with fractions and Year 9 algebra. Supports cylinder calculations and choosing methods for composite shapes.	• Design and Technology: circular components. • PE: running-track dimensions.
Representing Data 3 (to Spring)	Learners interpret statistical diagrams, calculate averages and draw conclusions. They use pie charts, scatter graphs and frequency polygons, assess predictions and distinguish correlation from causation. Target also revisits bar charts and pictograms.	Consolidates earlier data handling and proportional reasoning. Reading diagrams critically supports comparisons and informed conclusions in GCSE problems and everyday information.	• Geography: fieldwork and surveys. • Science: experimental data and relationships.

CELT Maths Curriculum 2026 – 2027 | Year 10 Foundation Spring Term

Module	What will learners learn?	How does this build a strong foundation?	Links to other subjects
Inequalities and Rounding	Learners represent and solve linear inequalities and round to decimal places and significant figures. Core also works with combined inequalities, truncation and error intervals.	Extends linear equations and place value. Describing permitted values and precision supports measurement, checking calculations and interpreting practical constraints.	• Science: measurement precision. • Design and Technology: acceptable dimensions.
Area and Volume 2	Learners calculate volume and surface area for cubes, cuboids and triangular prisms. Core extends this to other prisms, cylinders and finding missing lengths from given measurements.	Builds on area, circles and prism volume. Summing face areas and distinguishing square from cubic units supports practical measurement and geometric problem solving.	• Design and Technology: packaging materials. • Food Technology: container capacity.
Proportion, Compound Measures and Graphs	Learners solve ratio and direct or inverse proportion problems. They convert metric units and time, calculate speed and density, and interpret distance–time graphs, linking gradient to speed.	Connects proportional reasoning with graphs and measurement. Selecting consistent units and interpreting quantities per unit prepares learners for applied GCSE problems.	• Science: speed and density. • Geography: journeys and unit conversions. • Food Technology: scaling quantities.

CELT Maths Curriculum 2026 – 2027 | Year 10 Foundation Summer Term

Module	What will learners learn?	How does this build a strong foundation?	Links to other subjects
Sequences 2	Learners recognise special sequences, continue patterns and find arithmetic nth-term rules. They generate terms from rules. Core also tests whether values belong to a sequence.	Builds on Year 8 sequences and substitution. Expressing patterns algebraically connects number patterns with linear relationships.	• Computing: generate patterns with rules. • Art: repeating numerical patterns.
Congruency and Similarity	Learners identify congruent and similar shapes, including rotated figures. They use scale factors and corresponding sides to find missing lengths.	Connects transformations with ratio and scale. Comparing corresponding sides supports scale drawings and geometric reasoning.	• Design and Technology: scaled designs. • Geography: map scales.
Probability 3: Sets and Trees	Learners calculate single-event and complementary probabilities, interpret frequency trees and use simple set notation. Core also uses tree diagrams for independent events.	Builds on sample spaces, fractions and probability rules. Organising outcomes supports calculation and reasoning about chance.	• Science: outcomes of trials. • Computing: random simulations.
Negatives and Simultaneous Equations	Learners consolidate operations with negative numbers and solve simultaneous linear equations by elimination. They scale one or both equations when needed.	Connects directed number with equations. Finding values satisfying two conditions supports graphical solutions and contextual problems.	• Science: related equations. • PSHE: compare costs under two conditions.
Algebraic Graphs 3	Learners draw linear graphs, find their equations and solve simultaneous equations graphically. They interpret graphs in problems. Core also explores parallel-line equations.	Links equations with gradient and intercepts. Intersections connect graphical and algebraic solutions, supporting interpretation of relationships.	• Science: gradients and relationships. • Geography: graphical comparisons.
Scale and Construction	Learners interpret plans and elevations, use scale diagrams and make ruler and compass constructions. Core also applies bearings and finds regions satisfying loci.	Builds on scale and accurate measurement. Connects two-dimensional representations with three-dimensional shapes and geometric constraints.	• Design and Technology: plans and constructions. • Geography: maps and navigation.