

Mapping Cambridge Progression and Functional Skills to New GCSE Topics

Cambridge
PROGRESSION

Functional
SKILLS

English and maths

December 2015

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English and maths

This document shows how OCR's Cambridge Progression and Functional Skills units in English and maths map to the topics in the new GCSE English and maths for first teaching in September 2015.

Go to page 18 to read about the tools OCR has produced to help you identify your learners' current levels of English and maths and any skills gaps they may have.

English mapping

Cambridge Progression English units Underpinning Skills	Functional Skills English units Process Skills	New GCSE English topics Full range of cognitive thinking skills
<p>Level 1 Read for purpose and meaning in text on a variety of topics (Entry code 5428)</p> <p>Level 2 Read for implied purpose and meaning (Entry code 5429)</p> <p>Level 1 Interpret meaning in sentences in straightforward texts (Entry code 5433)</p> <p>Level 2 Interpret meaning in sentences in complex texts (Entry code 5434)</p>	<p>Level 1/Level 2 Reading components (1R, 2R) Writing components (1W, 2W)</p>	<p>Reading Information and ideas Learners read a wide range of high-quality non-fiction texts drawn from the 19th and either the 20th or 21st century. This may include for example, essays, journalism (both printed and online), travel writing, speeches and biographical writing.</p> <p>Learners are required to read in different ways for different purposes. They read and analyse texts that are designed, for example, to persuade, inform, instruct or advise.</p> <p>They explore how effectively texts achieve their purposes by comparing and evaluating</p>

<p>Level 1 Understand use of language in fiction and non-fiction texts (Entry code 05451)</p> <p>Level 2 Understand use of language in complex fiction and non-fiction texts (Entry code 05452)</p>		<p>the usefulness, relevance and presentation of ideas and information.</p> <p>Learners engage with texts, developing independent viewpoints and recognising different interpretations.</p> <p>They develop knowledge and understanding of linguistic and literary terminology to support their analysis of texts.</p>
<p>Level 1 Interpret meaning in sentences in straightforward texts (Entry code 5433)</p> <p>Level 2 Interpret meaning in sentences in complex texts (Entry code 5434)</p> <p>Level 1 Plan and sequence texts (Entry code 5441)</p> <p>Level 2 Plan and adapt texts (Entry code 5442)</p>	<p>Level 1/Level 2 Reading components (1R, 2R) Writing components (1W, 2W)</p>	<p>Writing for audience, impact and purpose Learners produce clear and coherent non-fiction pieces, including writing to:</p> <ul style="list-style-type: none"> • describe • explain • inform • instruct • argue • persuade. <p>Learners produce original texts in a range of non-fiction forms, for example, articles, speeches and letters.</p> <p>They develop skills to adapt their writing for different purposes, audiences and contexts.</p> <p>Learners explore how vocabulary and grammatical features can be used to achieve particular effects. They use techniques identified from their wide reading of non-fiction texts to achieve specific effects.</p>

<p>Level 1 Read for purpose and meaning in text on a variety of topics (Entry code 5428)</p> <p>Level 2 Read for implied purpose and meaning (Entry code 5429)</p> <p>Level 1 Interpret meaning in sentences in straightforward texts (Entry code 5433)</p> <p>Level 2 Interpret meaning in sentences in complex texts (Entry code 5434)</p> <p>Level 1 Plan and sequence texts (Entry code 5441)</p> <p>Level 2 Plan and adapt texts (Entry code 5442)</p> <p>Level 1 Understand use of language in fiction and non-fiction texts (Entry code 05451)</p> <p>Level 2 Understand use of language in complex fiction and non-fiction texts (Entry code 05452)</p>	<p>Level 1/Level 2 Reading components (1R, 2R) Writing components (1W, 2W)</p>	<p>Reading meaning and effects Learners read a wide range of high-quality prose fiction texts drawn from the 20th and/or 21st century. This may include, for example, extracts from novels, short stories or literary non-fiction such as autobiography.</p> <p>Learners engage with the detail in texts to draw inferences and recognise the possibility of different reactions.</p> <p>They explore the impact of writers' uses of language, structure and grammatical features on the reader.</p> <p>Learners support their ideas about texts with carefully selected evidence.</p> <p>They develop knowledge and understanding of linguistic and literary terminology to support their analysis of texts.</p>
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<p>Level 1 Construct compound sentences (Entry code 5438)</p> <p>Level 2 Construct complex sentences (Entry code 5439)</p> <p>Level 1 Interpret meaning in sentences in straightforward texts (Entry code 5433)</p> <p>Level 2 Interpret meaning in sentences in complex texts (Entry code 5434)</p> <p>Level 1 Plan and sequence texts (Entry code 5441)</p> <p>Level 2 Plan and adapt texts (Entry code 5442)</p>	<p>Level 1/Level 2 Reading components (1R, 2R) Writing components (1W, 2W)</p>	<p>Writing imaginatively and creatively Learners produce imaginative, original texts in a range of forms, including, for example, short stories and autobiographical writing.</p> <p>They use narrative techniques identified from their wide reading of prose fiction texts to achieve deliberate effects in their own writing.</p> <p>Learners explore how vocabulary and grammatical features can be used to achieve particular effects.</p> <p>They develop skills to adapt their writing for different purposes and contexts.</p> <p>Learners apply their knowledge and understanding of linguistic and literary conventions to create impact in their own writing</p>
<p>Level 1 Speak to communicate information, ideas and opinions (Entry code 5446)</p> <p>Level 2 Speak to communicate information, ideas and opinions (Entry code 5447)</p> <p>Level 1 Develop discussions (Entry code 5449)</p>	<p>Level 1/Level 2 Reading components (1R, 2R) Writing components (1W, 2W)</p>	<p>Spoken Language Presenting information and ideas.</p> <p>Responding to spoken language.</p> <p>Spoken Standard English.</p>

<p>Level 2 Manage discussions (Entry code 5450)</p> <p>Level 1 Listen to actively respond in dialogue (Entry code 5724)</p> <p>Level 2 Listen to respond in a constructive manner (Entry code 5725)</p>		
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Maths Mapping

Cambridge Progression Maths units Underpinning Skills	Functional Skills Maths units Process Skills	New GCSE Maths topics Full range of cognitive thinking skills
<p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p> <p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Calculations with integers.</p> <hr/> <p>Four rules.</p>
<p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Whole number theory.</p> <hr/> <p>Definitions and terms.</p>

<p>Level 1 Fractions, decimals and percentage (Entry code 5754)</p> <p>Level 2 Fractions and decimals (Entry code 5760)</p> <p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>		
<p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p> <p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry Code 05864)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Prime numbers.</p>

<p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p> <p>Level 1 Fractions, decimals and percentage (Entry code 5754)</p> <p>Level 2 Fractions and decimals (Entry code 5760)</p> <p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry Code 05864)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Highest Common Factor (HCF) and Lowest Common Multiple (LCM).</p>
<p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Combining arithmetic operations.</p> <p>Priority of operations.</p> <p>Inverse operations.</p> <p>Inverse operations.</p>

<p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>		
<p>Level 1 Fractions, decimals and percentages (Entry code 5754)</p> <p>Level 2 Fractions and decimals (Entry code 5760)</p> <p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Fractions.</p> <p>Equivalent fractions.</p> <p>Calculations with fractions.</p> <p>Fractions of a quantity.</p> <p>Decimal fractions.</p> <p>Decimals and fractions.</p> <p>Addition, subtraction and multiplication of decimals.</p> <p>Division of decimals.</p> <p>Percentages.</p> <p>Percentage conversions.</p> <p>Percentage calculations.</p> <p>Percentage change.</p>

		Ordering fractions, decimals and percentages.
		Ordinality.
Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)	Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)	Symbols.
Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)		Powers and roots.
Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)		Index notation.
Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)		Calculation and estimation of powers and roots.
		Laws of indices.
		Standard form.
		Standard form.
		Calculations with numbers in standard form.
Level 1 Fractions, decimals and percentages (Entry code 5754)	Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)	Exact calculations.
Level 2 Fractions and decimals (Entry code 5760)		Exact calculations.
		Manipulating surds.
		Approximation and estimation.
		Rounding.
		Estimation.

<p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>		Upper and lower bounds.
		Calculations with ratio.
		Equivalent ratios.
		Division in a given ratio.
		Ratios and fractions.
		Solve ratio and proportion problems.
		Direct and inverse proportion.
		Direct proportion.
		Inverse proportion.
<p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p> <p>Level 1 Fractions, decimals and percentages (Entry code 5754)</p> <p>Level 2 Fractions and decimals (Entry code 5760)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Discrete growth and decay.</p> <p>Growth and decay.</p>

<p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>		
<p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p> <p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	<p>Algebraic expressions.</p> <p>Algebraic terminology and proofs.</p> <p>Collecting like terms in sums and differences of terms.</p> <p>Simplifying products and quotients.</p> <p>Multiplying out brackets.</p> <p>Factorising.</p> <p>Completing the square.</p> <p>Algebraic fractions.</p> <p>Formulate algebraic expressions.</p> <p>Substitute numerical values into formulae and expressions.</p> <p>Change the subject of a formula.</p> <p>Recall and use standard formulae.</p>

		Use kinematics formulae.
		Algebraic equations.
		Linear equations in one unknown.
		Quadratic equations.
		Simultaneous equations.
		Approximate solutions using a graph.
		Approximate solutions by iteration.
		Algebraic inequalities.
		Inequalities in one variable.
		Inequalities in two variables.
		Language of functions.
		Functions.
		Sequences.
		Generate terms of a sequence.
		Special sequences.
Level 1 Interpret data and the outcomes of events (Entry code 5757)	Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)	Graphs of equations and functions.
		x- and y- coordinates.
		Graphs of equations and functions.

<p>Level 2 Compare and interpret data and record probability (Entry code 5759)</p> <p>Level 1 Core Algebra. Simple linear expression, equations, inequalities and graphs (Entry code 05863)</p> <p>Level 2 Further Core Algebra. Expressions, equations, formulas, sequences and linear graphs (Entry code 05864)</p>		Polynomial and exponential functions.
		Exponential functions.
		Trigonometric functions.
		Equations of circles.
		Straight line graphs.
		Straight line graphs.
		Parallel and perpendicular lines.
		Transformations of curves and their equations.
		Translations and reflections.
		Interpreting graphs.
		Graphs of real-world contexts.
		Gradients.
		Areas.

<p>Level 1 Calculating shape and space of regular and non-regular shapes and compass directions (Entry code 5753)</p> <p>Level 2 Using formula for shape, space and measurement conversions (Entry code 5762)</p> <p>Level 1 Core geometry, angles, simple shapes, reflection, rotation and mensuration (Entry code 05865)</p> <p>Level 2 Further core geometry. Solving problems in triangles and quadrilaterals, calculating areas and volumes, transformations and similarity (Entry code 05866)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)</p>	Conventions, notation and terms.
		2D and 3D shapes.
		Angles.
		Polygons.
		Polyhedra and other solids.
		Diagrams.
		Geometrical instruments.
		x- and y- coordinates.
		Ruler and compass constructions.
		Perpendicular bisector.
		Angle bisector.
		Perpendicular from a point to a line.
		Loci.
		Angles.
		Angles at a point.
Angles on a line.		
Angles between intersecting and parallel lines.		
Angles in polygons.		

		Properties of polygons.
		Properties of a triangle.
		Properties of quadrilaterals.
		Symmetry.
		Circles.
		Circle nomenclature.
		Angles subtended at centre and circumference.
		Angle in a semicircle.
		Angle in the same segment.
		Angle between radius and chord.
		Angle between radius and tangent.
		The alternate segment theorem.
		Cyclic quadrilaterals.
		Three-dimensional shapes.
		3-dimensional solids.
		Plans and elevations.

		Plane isometric transformations.
		Reflection.
		Rotation.
		Translation.
		Combinations of transformations.
		Congruence.
		Congruent triangles.
		Applying congruent triangles.
		Plane vector geometry.
		Vector arithmetic.
		Column vectors.
		Similarity.
		Similar triangles.
		Enlargement.
		Similar shapes.
Level 1 Calculating shape and space of regular and non-regular shapes and compass directions (Entry code 5753)	Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2) Interpreting (I1, I2)	Units of measurement.
		Units of measurement.
		Compound units.

<p>Level 1 Core geometry, angles, simple shapes, reflection, rotation and mensuration (Entry code 05865)</p> <p>Level 2 Further core geometry. Solving problems in triangles and quadrilaterals, calculating areas and volumes, transformations and similarity (Entry code 05866)</p>	Maps and scale drawings.
	Perimeter calculations.
	Perimeter of rectilinear shapes.
	Circumference of a circle.
	Perimeter of composite shapes.
	Area calculations.
	Area of a triangle.
	Area of a parallelogram.
	Area of a trapezium.
	Area of a circle.
	Area of composite shapes.
	Volume and surface area calculations.
	Polyhedra.
	Cones and spheres.
	Pyramids.
	Triangle mensuration.
	Pythagoras' theorem.
	Trigonometry in right-angled triangles.

		Exact trigonometric ratios.
		Sine rule.
		Cosine rule.
<p>Level 2 Using formula for shape, space and measurement conversions (Entry code 5762)</p> <p>Level 1 Interpret data and the outcomes of events (Entry code 5757)</p> <p>Level 2 Compare and interpret data and record probability (Entry code 5759)</p>		Probability.
		The probability scale.
		Relative frequency.
		Relative frequency and probability.
		Equally likely outcomes and probability.
		Combined events and probability diagrams.
		Sample spaces.
		Enumeration.
		Venn diagrams and sets.
		Tree diagrams.
		The addition law of probability.
		The multiplication law of probability and conditional probability.
<p>Level 1 Interpret data and the outcomes of events (Entry code 5757)</p>	<p>Level 1/Level 2 Representing components (R1, R2, R3) Analysing components (A1, A2)</p>	Sampling.
		Populations and samples.

<p>Level 2 Compare and interpret data and record probability (Entry code 5759)</p> <p>Level 1 Calculations with whole numbers, simple ratio and direct proportion (Entry code 5756)</p> <p>Level 2 Calculation with whole numbers, ratio and direct proportion (Entry code 5761)</p>	Interpreting (I1, I2)	Interpreting and representing data.
		Categorical and numerical data.
		Grouped data.
		Analysing data.
		Summary statistics.
		Misrepresenting data.
		Bivariate data.
		Outliers.

Now that you can see how your learners can progress from Cambridge Progression to Functional Skills to GCSE, you'll need to know the tools OCR has provided to help you.

When starting a new programme of English and maths learning, it's really important to know the level of skills your new learners have and the areas of skills that they need to improve.

In order to help you do this, OCR has produced some Initial Assessment (IA) Tests and Diagnostic Assessment (DA) Tests. The IA Tests show your learners overall level. The DA Tests show any underpinning gaps in your learners' skills.

First of all, your learners should take some IA Tests to see the level of skills they have. See the list of IA Tests below.

<ul style="list-style-type: none">• Functional Skills in English at Level 1 Unit 2 Reading• Functional Skills in English at Level 1 Unit 3 Writing• Functional Skills in English at Level 2 Unit 2 Reading• Functional Skills in English at Level 2 Unit 3 Writing	<ul style="list-style-type: none">• Functional Skills in Maths at Level 1• Functional Skills in Maths at Level 2
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The IA Tests are available free of charge to all OCR centres and are available from Interchange. Link below:

<https://interchange.ocr.org.uk>

The IA Tests will show which level of skills the learner is working at.

Next, your learners should take some DA Tests for the level above the level they achieved on their IA Tests. For example, if the IA for English skills is Level 1, then a Level 2 Diagnostic Assessment should be completed.

The DA tests will show if they have any underpinning skills gaps they need to fill before they begin their Level 2 Functional Skills or GCSE learning programme. See the list of DA tests below.

<ul style="list-style-type: none">• English Entry Level 1• English Entry Level 2• English Entry Level 3• English Level 1• English Level 2	<ul style="list-style-type: none">• Maths Entry Level 1• Maths Entry Level 2• Maths Entry Level 3• Maths Level 1• Maths Level 2
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The DA Tests are available free of charge to all OCR centres and are available from Interchange. Link below:

<https://interchange.ocr.org.uk>

Once your learners have successfully completed their IA, DA and secured any Level 2 underpinning skills gaps using the Cambridge Progression units, they will be ready to begin their Level 2 Functional Skills or GCSE programmes of learning.

Education Funding Agency/Skills Funding Agency funding is available for Cambridge Progression qualifications/units to ensure learners are ready to begin their Level 2 studies.

Starting with Cambridge Progression will ensure that your learners acquire the underpinning knowledge that they need to move onto the process skills that will acquire from completing Functional Skills and then to the full range of cognitive thinking skills that they will gain when they complete their GCSEs.