Getting Started:
Entry Level Certificate in Mathematics

Contents

1. Introduction

This Getting Started Guide provides an overview of the new Entry Level Certificate in Mathematics specification, to help you to get to grips with the changes to content and assessment, and to help you to understand what these mean for you and your students.

We've listened to feedback from all parts of the mathematics community and taken this redevelopment as an opportunity to redesign the Entry Level Certificate so that it complements GCSE Mathematics (9–1). The Certificate provides a progression route to GCSE but also supports advancement in mathematics by cementing core understanding and maximising engagement with the subject.

The Entry Level Certificate qualifications are designed to be taught in small steps, to meet students' individual learning styles. Each level is assessed only when you decide that your students are ready.

Easy to co-teach with GCSE Mathematics

The content of the new specification for Entry Level Certificate in Mathematics is based on the key underpinning skills and concepts of GCSE (9–1) Mathematics, with new topics at Entry Level 3 carefully selected from the more accessible topics in GCSE (9–1) Mathematics. The progression of content from the Entry Level Certificate to GCSE Mathematics, and the alignment of topics within the two qualifications, ensures students can retain the option to work towards the GCSE examinations should they progress well through the Entry Level Certificate course. Equally, students who have followed the GCSE Mathematics course will have the option to sit the Entry Level Certificate tests. Dual entry of GCSE (9-1) Mathematics and Entry Level Certificate is possible.

Designed to encourage progression to GCSE

The Entry Level Certificate allows students who are working below GCSE to demonstrate their ability to use and apply mathematics both in practical tasks and in real-life problems. Achieving the qualification evidences knowledge and skills within number, algebra, ratio and proportion, geometry and measures, and statistics.

We've introduced calculator and non-calculator tests at Entry Level 3 and redesigned our Assessment Objectives to support progression to GCSE (9–1) Mathematics.

Assessments designed around the needs of students at this level

Clear, level-targeted tests assess small increments of progress; this builds students' confidence as they are faced only with questions at their level. At the same time, the tests assess the use and application of standard techniques (AO1) so students have the opportunity to demonstrate what they can do.

Assessment of reasoning, interpretation and communication (AO2) and of problem solving (AO3) takes place via the tasks. The tasks are structured as a series of nested activities which support students to progress as far as they are able. Use of relevant equipment in the tasks is required.

All assessments are taken when the student is ready and may be reattempted up to a total of three attempts, but by using a different test / task each time. There is no stipulated length of time for the assessments so students may take as long as they need.

1. Introduction

Straightforward to administer and manage

There are two assessment components at each of Entry Level 1 and Entry Level 2, and three assessment components at Entry Level 3. (See specification, page 20.)

All the assessments are externally set by Edexcel, thus saving teacher time and ensuring consistency. Both tests and tasks are marked by the teacher against straightforward points-based mark schemes, and moderated by Edexcel.

Assessments can be taken at any time and in any order. They are sat under controlled conditions, which may be in the normal classroom environment. There is no time limit for the assessments.

Our support

We will be providing a package of support to help you plan and implement the new specification, including a course plan for a dedicated Entry Level course and a scheme of work showing how the Entry Level Certificate can be integrated with an Access to Foundation GCSE programme.

There are detailed mapping documents showing how the legacy and new Entry Level Certificates compare.

Sample assessment materials for both the tests and tasks are also available.

Launch and Getting Ready to Teach events are available to support you with introducing the course.

Support documents will be available on:

- the Entry Level Certificate in Mathematics subject page (quals.pearson.com/entrylevelmaths17)
- the Mathematics Emporium:
  - www.edexcelmaths.com
  - Email: mathsemporium@pearson.com
  - Twitter: @EmporiumMaths

2. What's changed?

2.1 What are the changes to the Entry Level Certificate in Mathematics qualification?

The Entry Level Certificate in Mathematics has been revised in response to wider changes to secondary mathematics, in particular the introduction of the new GCSE (9–1) Mathematics. The Entry Level Certificate in Mathematics has been redeveloped to align with the new content of GCSE and to support progression to GCSE.

As with the legacy specification, the Entry Level Certificate in Mathematics can be achieved at Entry Level 1, Entry Level 2 and Entry Level 3.

The content for the Entry Level Certificate in Mathematics has been revised. The new Entry Level Certificate in Mathematics is designed to sit alongside GCSE (9–1) Mathematics, as both are based on the key stage 4 programme of study.

2.2 Changes to the specification

Specification overview

The tables below provide a content overview and summary of assessment for each of the levels within the Entry Level Certificate in Mathematics.

Entry Level 1 assessments

Content overview – for test and task	
- Number: Count; Read, write and order; Fractions and decimals; Pattern; Facts; Equipment - Geometry: 2D shapes; 3D shapes; Position, movement and pattern - Measures: Units; Measuring instruments - Statistics	
Component 1: Test	**Component 2: Task**
60% of the qualification *12 marks*	*40% of the qualification* *8 marks*

Entry Level 2 assessments

Content overview – for test and task	
- Number: Count; Read, write and order; Fractions and decimals; Pattern; Facts; Operations; Equipment - Geometry: 2D shapes; 3D shapes; Position, movement and pattern; Angles - Measures: Units; Measuring instruments - Statistics	
Component 1: Test	**Component 2: Task**
60% of the qualification *18 marks*	*40% of the qualification* *12 marks*

Entry Level 3 assessments

Content overview – for calculator and non-calculator tests	
Can appear on either or both tests • Number: Count; Read, write and order; Fractions and decimals; Pattern; Facts; Operations	
Can appear on the non-calculator test	**Can appear on the calculator test**
• Algebra • Geometry: 2D shapes; 3D shapes; Position, movement and pattern; Angles • Statistics	• Numbers: Equipment • Ratio and proportion • Geometry: Perimeter and area • Measures: Units; Measuring instruments
Component 1: Non-calculator test	**Component 2: Calculator test**
36% of the qualification *18 marks*	*24% of the qualification* *12 marks*
Content overview – for task	
All Entry Level 3 content can be assessed in the task.	
Component 3: Task	
40% of the qualification *20 marks*	

Changes to specification content

The content of our new specification is based on the key underpinning skills and concepts of GCSE (9–1) Mathematics, with new topics at Entry Level 3 carefully selected from the more accessible topics in GCSE (9–1) Mathematics.

Content mappings are available to show the relationship between the new Entry Level Certificate and the previous Entry Level Certificate.

A summary of the key changes to content at each Entry Level is given below. This includes details of the new topics – Algebra, and Geometry: Perimeter and area – which appear in Entry Level 3 only. Clarification of other content areas has also been included in the new Entry Level Certificate specification.

New content at Entry Level 1:

- Recognise and use halves (previously Entry Level 3).
- Use given equipment for a stated purpose.
- Use the mathematical names for rectangle and circle (previously Entry Level 2).
- Use simple measuring instruments (previously Entry Level 2).
- Extract information from lists (previously Entry Level 3).

New content at Entry Level 2:

- Recognise odd and even numbers (previously embedded within other content statements).
- Recognise and use halves of numbers up to 10 in context (previously Entry Level 3).
- Recognise and use quarters (previously Entry Level 3).

New content at Entry Level 3:

- Round any positive integer less than 100 to the nearest 10.
- Recognise the equivalence of very simple fractions ($\frac{1}{2}$ s and $\frac{1}{4}$ s only).
- Recognise simple equivalents (0.5 & $\frac{1}{2}$, 0.25 & $\frac{1}{4}$, 0.75 & $\frac{3}{4}$).
- Recognise unit fractions such as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$, and use them to find fractions of shapes and numbers.
- Recognise simple fractions that are several parts of a whole and be able to shade shapes to illustrate those fractions (where those shapes have no more than 20 components).
- Find fractional quantities of numbers up to 20, such as $\frac{1}{4}$ of 20, $\frac{1}{3}$ of 15
- Interpret a calculator display as money (previously did not include money).
- Use a calculator to add and subtract money.
- Know and use halving as the inverse of doubling.
- Halve even two-digit numbers with even tens.
- Double numbers up to 50 (to give a maximum answer of 100).
- Halve even two-digit numbers with odd tens.
- Identify pairs of factors of numbers up to 50.
- Add and subtract one-, two- and three-digit numbers (previously covered, but now more specific).
- Multiply a two-digit number by a single digit.
- Understand and use the different vocabulary for the four rules of number.
- Solve very basic equations.
- Collect like terms.
- Use simple word formulae.
- Use direct proportion in simple problems.
- Find the perimeter of a rectangle by adding lengths of sides.
- Find the area of a rectangle by counting squares.
- Find the area of a rectangle by multiplying length by width.
- Read and plot coordinates in the first quadrant.
- Identify an angle as smaller than a right angle or bigger than a right angle.
- Express a length given in metres and in centimetres.
- Express a price given in pounds and in pence.
- Work with time, including 12-hour and 24-hour clocks.
- Use a protractor to measure acute and obtuse angles to the nearest 10°.
- Read simple pie charts.

2. What's changed?

Changes to Assessment Objectives

The new Entry Level Certificate has three Assessment Objectives, which reflect the three Assessment Objectives for GCSE (9–1) Mathematics.

Assessment Objective		Weighting
AO1	Use and apply standard techniques	60%
AO2	Reason, interpret and communicate mathematically	25–30%
AO3	Solve problems within straightforward contexts	10–15%

See section 5.2 for more detail on the Assessment Objectives.

Changes to assessment

We have designed our assessments so that they are fit for purpose for students not yet ready for GCSE (9–1) Mathematics, or for those whose expected performance is not secure.

Entry Level 1 and Entry Level 2 are each assessed by a non-calculator test and a calculator-allowed task. Entry Level 3 is assessed by two tests (one non-calculator and one calculator) and a calculator-allowed task. The tests and tasks for each Entry Level are externally set. The tests and tasks can each be taken when students are ready. Students can work their way up through the levels, being assessed at each one in turn, or they can be assessed at Entry Level 2 or Entry Level 3 directly.

The tests are designed to be sat in the classroom under controlled conditions. The questions on the tests will be mostly 1-mark question parts with some 2-mark question parts. The number of marks on each test varies and is summarised in the tables on pages 4 and 5.

The tasks are practical skills-based activities which are conducted in the classroom under controlled conditions. The tasks are nested across all three Entry Levels. The use of calculators is allowed in all tasks, at all levels. The number of marks allocated to the task for each Entry Level is summarised in the tables on pages 4 and 5.

The tasks are now assessed using a points-based mark scheme. Previously the task was broadly assessed against competency statements to see whether it had been achieved or not at the different Entry Levels; the points-based mark scheme will allow the task to be counted towards the qualification in a more significant way, which means that candidates who perform well on the task will gain more credit for this. The use of a points-based mark scheme is also designed to make the process of assessment of the task easier for teachers involved in the delivery of the qualification.

The language used in both the tests and tasks has been carefully considered to ensure readability and clarity of our assessments, allowing students to demonstrate their skills and understanding.

3. Planning

3.1 Identifying Entry Level Certificate students and the appropriate level

Identifying Entry Level Certificate students

The Entry Level Certificate in Mathematics is a suitable choice for students who may find the GCSE (9–1) Mathematics course challenging.

The course will enable students to develop basic mathematical knowledge, skills and understanding, to reason mathematically, and to solve problems by applying their mathematics to a variety of routine problems. The course supports and gives some coverage of the key stage 4 programme of study, providing a progression route to GCSE (9–1) Mathematics.

Identifying the appropriate level of entry

The Entry Level Certificate in Mathematics is available at Entry Level 1, Entry Level 2 and Entry Level 3. When deciding upon the appropriate level of entry for your students, one option is to assess the Entry Level task first as the tasks are nested (starting at Entry Level 1, progressing through Entry Level 2 and then finishing with Entry Level 3). An alternative approach would be to build up level by level with students moving on to the next level once they have achieved at the current level. Use of sample assessment materials may assist in this process.

Teaching time

We are aware that teaching time for mathematics varies between schools. The specification content, scheme of work and course planner for Entry Level Certificate is based on 120 hours of teaching time for each of Entry Level 1, Entry Level 2 and Entry Level 3; however, many students will start the course with knowledge of the content of one or more of the Entry Levels.

Delivering ELC alongside GCSE (9–1) Mathematics

The learning objectives and subject content requirements of the Entry Level Certificate in Mathematics have been chosen to support progression to GCSE (9–1) Mathematics. We have provided a combined scheme of work for the new Entry Level Certificate and our Access to Foundation GCSE programme. This scheme of work highlights the touch points between the new ELC and the GCSE (9–1) in Mathematics to support this model of delivery.

There are many ways to structure your course and we recognise the need for flexibility. For example, courses may be taught over different years, accommodating different amounts of teaching time.

Options you may consider include:

- Identifying your lower attainers and teaching only the Entry Level Certificate in Mathematics to them.
- Teaching all students GCSE Mathematics Foundation tier content and either extending GCSE learning or consolidating/recapping and taking the ELC assessments. This is also known as a spiral curriculum.
- Teaching all students GCSE Mathematics Foundation tier and integrating the ELC tests and tasks.

3.2 Suggested resources

Course planner

Our course planner provides a possible plan for the delivery of a dedicated Entry Level Certificate in Mathematics course. The planner can be used for a group of students working towards different ELC levels so that Entry Level 1, Entry Level 2 and Entry Level 3 are taught together. It can also be used for a group of students who are all working towards the same level.

Scheme of work

Our scheme of work shows how students can cover elements of GCSE (9–1) Mathematics as well as the Entry Level Certificate in Mathematics. Students will have the option during the course to consolidate the Entry Level Certificate and take their assessments for this, and/or to strengthen and extend GCSE knowledge to enter for the GCSE (9–1) Mathematics qualification.

You could also use the Entry Level Mathematics content in the scheme of work independently to the GCSE if you are not planning to enter a group of students for GCSE (9–1) Mathematics.

4. Content guidance

Below is an overview of the topics that make up the ELC in Mathematics:

Topic	Content	Notes
1	Number: Count	
2	Number: Read, write and order	
3	Number: Fractions and decimals	
4	Number: Pattern	
5	Number: Facts	
6	Number: Operations	EL2 and EL3 only
7	Number: Equipment	
8	Algebra	EL3 only
9	Ratio and proportion	EL3 only
10	Geometry: 2D shapes	
11	Geometry: 3D shapes	
12	Geometry: Perimeter and area	EL3 only
13	Geometry: Position, movement and pattern	
14	Geometry: Angles	EL2 and EL3 only
15	Measures: Units	
16	Measures: Measuring instruments	
17	Statistics	

Algebra has been introduced at Entry Level 3. This is a basic introduction to the topic and includes:

- solving very basic equations; for example, What number is ★? 15+★=27
- collecting like terms; for example, Simplify $a + a$
- using simple word formulae; for example, Number of millimetres = number of centimetres × 10

The topic area of Ratio and proportion has also been introduced at Entry Level 3. This is a basic introduction to the topic and involves using direct proportion in simple problems; for example, if 2 cakes cost 30 pence, find the cost of 6 cakes. Understanding of ratios is not explicitly expected; hence this is limited to problems where the use of a single integer scale factor (multiplier) is needed.

Geometry: Perimeter and area has also been introduced at EL3. This includes:

- find a perimeter of a rectangle by adding the lengths of sides
- find the area of a rectangle by counting squares
- find the area of a rectangle by multiplying length by width.

5. Assessment guidance

5.1 Assessment overview

Entry Level 1

Component 1: Test Non-calculator 60% of the qualification 12 marks	**Component 2: Task** Calculator allowed 40% of the qualification 8 marks

Entry Level 2

Component 1: Test Non-calculator 60% of the qualification 18 marks	**Component 2: Task** Calculator allowed 40% of the qualification 12 marks

Entry Level 3

Component 1: **Non-calculator test** Non-calculator 36% of the qualification 18 marks	**Component 2:** **Calculator test** Calculator allowed 24% of the qualification 12 marks	**Component 3: Task** Calculator allowed 40% of the qualification 20 marks

Candidates may take the assessment for each Entry Level (working up through the levels) or may directly access Entry Level 2 or Entry Level 3.

The task is nested:

- a student taking Entry Level 1 only needs to complete the Entry Level 1 part (Part 1) and may only claim marks from Part 1 towards their award
- a student taking Entry Level 2 only needs to complete the Entry Level 1 part (Part 1) and Entry Level 2 part (Part 2) and may only claim marks from Parts 1 and 2 towards their award
- a student taking Entry Level 3 may claim marks from all parts (Parts 1, 2 and 3) of the task.

The level being attempted does not have to be decided before the task is attempted – students may attempt the full task and then count the marks from the appropriate part(s) towards their award. If a student takes a test at a higher level, their attempt at the task may be reassessed to include the marks from the higher

level if they proceeded that far, or a different task may be used as an alternative (or retake).

5.2 Assessment objectives

The Entry Level Certificate has three assessment objectives which reflect the three assessment objectives for GCSE (9–1) Mathematics.

	Students must:	% in Entry Level Certificate
AO1	Use and apply standard techniques	60
AO2	Reason, interpret and communicate mathematically	25–30
AO3	Solve problems within straightforward contexts	10–15
	Total	**100%**

Breakdown of assessment objectives

AO1 is only assessed within the tests for each Entry Level.

AO2 and AO3 are only assessed through the task for each Entry Level.

Component	Assessment Objectives			Total for all Assessment Objectives
	AO1 %	**AO2 %**	**AO3 %**	
Entry Level 1				
Component 1: Test	60	0	0	60
Component 2: Task	0	25–30	10–15	40
Total for Entry Level Certificate	**60%**	**25–30%**	**10–15%**	**100%**
Entry Level 2				
Component 1: Test	60	0	0	60
Component 2: Task	0	25–30	10–15	40
Total for Entry Level Certificate	**60%**	**25–30%**	**10–15%**	**100%**
Entry Level 3				
Component 1: Non-calculator test	36	0	0	36
Component 2: Calculator test	24	0	0	24
Component 3: Task	0	25–30	10–15	40
Total for Entry Level Certificate	**60%**	**25–30%**	**10–15%**	**100%**

5.3 Coverage of content in tests and tasks

At Entry Level 1 and Entry Level 2, all content may be assessed on the test and in the task.

At Entry Level 3, all content may be assessed in the task but there are some restrictions on the content that may be assessed in each of the tests. These restrictions are shown in the table below.

Entry Level 3 content overview – for calculator and non-calculator tests	
Can appear on either or both tests	
• Number: Count; Read, write and order; Fractions and decimals; Pattern;' Facts; Operations	
Can appear on the non-calculator test	**Can appear on the calculator test**
• Algebra • Geometry: 2D shapes; 3D shapes; Position, movement and pattern; Angles • Statistics	• Number: Equipment • Ratio and proportion • Geometry: Perimeter and area • Measures: Units; Measuring instruments

5.4 Availability of assessment materials

The following sample tests, tasks and mark schemes are available:

- A sample test for Entry Level 1
- A sample test for Entry Level 2
- Sample tests for Entry Level 3 – one for the non-calculator paper and one for the calculator paper.
- A sample task for Entry Level 1 (comprising Part 1 only)
- A sample task for Entry Level 2 (comprising Parts 1 and 2 only)
- A sample task for Entry Level 3 (comprising Parts 1, 2 and 3)

Three sets of live papers and mark schemes will be available for Entry Level Mathematics with each set consisting of an Entry Level 1 test, an Entry Level 2 test, a pair of Entry Level 3 tests (one for the non-calculator paper and one for the calculator paper), a task covering all three Entry Levels and the associated mark schemes. These sets of live papers and mark schemes will be available from early 2018.

6. Administering the tests

The tests and tasks are designed to be taken when your students are ready. This could be at different points during the year, depending on a number of factors including whether you are teaching just the Entry Level Certificate in Mathematics or are teaching this alongside GCSE Mathematics Foundation tier, and whether your students are building up level by level or starting with Entry Level 2 or Entry Level 3.

When you are ready to administer the test or task, you can download a clean master copy of the test and mark scheme from the secure area of the website (quals.pearson.com/entrylevelmaths17) and print then photocopy a paper (test or task) for each of your students. If you download the assessments in advance, they must be kept confidential and under secure conditions at all times. The tests, tasks and mark schemes will remain valid for the lifetime of the qualification.

Other points to be aware of:

- Students need to take the test(s) and complete the appropriate sections of the task for the Entry Level that they are entered for. For example, Entry Level 2 students should complete the Entry Level 2 test and Parts 1 and 2 of the task.

- The tests and tasks can be sat in normal classroom conditions but other examination procedures apply regarding invigilation and safeguards against communication between students.

- There is no set time for when each test or task is completed or how long the student may take to complete these.

- Students are not allowed to retake the same version of a test or task. If a student's work is incomplete or inadequate, they can take another version of the test or task.

- If required, Entry Level 3 students may retake just the non-calculator test or just the calculator test.

6.1 Marking and moderation

Marking the tests

Once your students have taken the test, you should mark it according to the published mark scheme.

Marking the tasks

The tasks for the new ELC in Mathematics have a points-based mark scheme; this differs from the tasks in the legacy ELC in Mathematics qualification. The mark scheme sets out what is required for each mark to be awarded, and guidance is given on what may and may not be accepted for the mark.

Additional guidance will be made available for teachers marking the tests and tasks.

Moderation

Once your students have sat the test(s) and task for the Entry Level they are aiming to achieve and you are satisfied that they do not need to retake any elements, you will need to submit their best score for each assessment component using the assessment authentication sheet in Appendix 1 of the specification. The example on the next page shows a completed authentication sheet for a student

who is being entered for Entry Level 2. If a student has taken more than one of the appropriate tests or completed more than one task, then only the best score needs to be recorded on the record sheet.

When asked to send samples of work for moderation, it is only the task and the test(s) that provide the evidence of the best score that need be sent. If these are re-tests, then previous attempts (which do not add evidential scores) need not be sent as part of this sample.

The assessment authentication sheet needs to be submitted to Pearson Edexcel by May in the year of certification.

The teacher must complete and sign the teacher declaration.

The student must complete and sign the candidate declaration.

The teacher and the student do not need to complete their declarations on the same date, but the authentication form is not valid if these sections are not completed. The moderator will send back any incomplete authentication forms before accepting the marks from a centre.

Once we have received the forms for your students, we will request selected tests and tasks to be sent in to us for moderation.

Example of a completed Assessment authentication sheet:

Appendix 1: Assessment authentication sheet

Please complete for the Entry Level that the candidate is being entered for.

Pearson Edexcel Entry Level Certificate in Mathematics		NMA0
Centre name: AN CENTRE		Centre number: 00001
Candidate name: JOHN SMITH		Candidate number: 1234

Entry Level 1		Marks awarded
Component 1: Test		/12
Component 2: Task (Part 1)		/8
	Total Marks	/20
Entry Level 2		**Marks awarded**
Component 1: Test		14/18
Component 2: Task (Part 1 and Part 2)		9/12
	Total Marks	23/30
Entry Level 3		**Marks awarded**
Component 1: Non-calculator test		/18
Component 2: Calculator test		/12
Component 3: Task (Part 1, Part 2 and Part 3)		/20
	Total Marks	/50

6. Administering the tests

Teacher declaration

I declare that the work submitted for assessment has been carried out without assistance other than that which is acceptable according to the rules of the specification.

Teacher name:	ANN JONES		
Teacher signed:	Am Jones	Date:	18/4/18

Candidate declaration

I certify that the work submitted for this assessment is my own. I understand that false declaration is a form of malpractice.

Candidate signed:	John Sml	Date:	25/4/18

Level of achievement

The pass mark for each Entry Level is 70%.

The level of achievement for each Entry Level is given below:

Level	Minimum total marks required
Entry Level 1	14/20
Entry Level 2	21/30
Entry Level 3	35/50

7. Entries and fees

The ELC in Mathematics is a single qualification available at three levels – Entry Level 1, Entry Level 2 and Entry Level 3.

The entry codes for the qualification are below:

Type of code	Use of code	Code
Regulated Qualifications Framework (RQF) codes	Each qualification title is allocated an Ofqual Regulated Qualifications Framework (RQF) code. The RQF code is known as a Qualification Number (QN). This is the code that features in the DfE Section 96 and on the LARA as being eligible for 16–18 and 19+ funding, and is to be used for all qualification funding purposes. The QN will appear on students' final certification documentation.	603/1330/4
Subject codes	The subject code is used by centres to enter students for a qualification. Centres will need to use the entry codes only when claiming students' qualifications.	Entry Level Mathematics – NMA0

Entry fees and registration deadlines for this qualification can be found in our General Qualifications UK fees document, which is available on our website: qualifications.pearson.com/en/support/support-topics/centre-administration/fees.html

Details of how to enter students for the examinations for this qualification can be found in our UK Information Manual. A copy is made available to all examinations officers and is available on our website: qualifications.pearson.com