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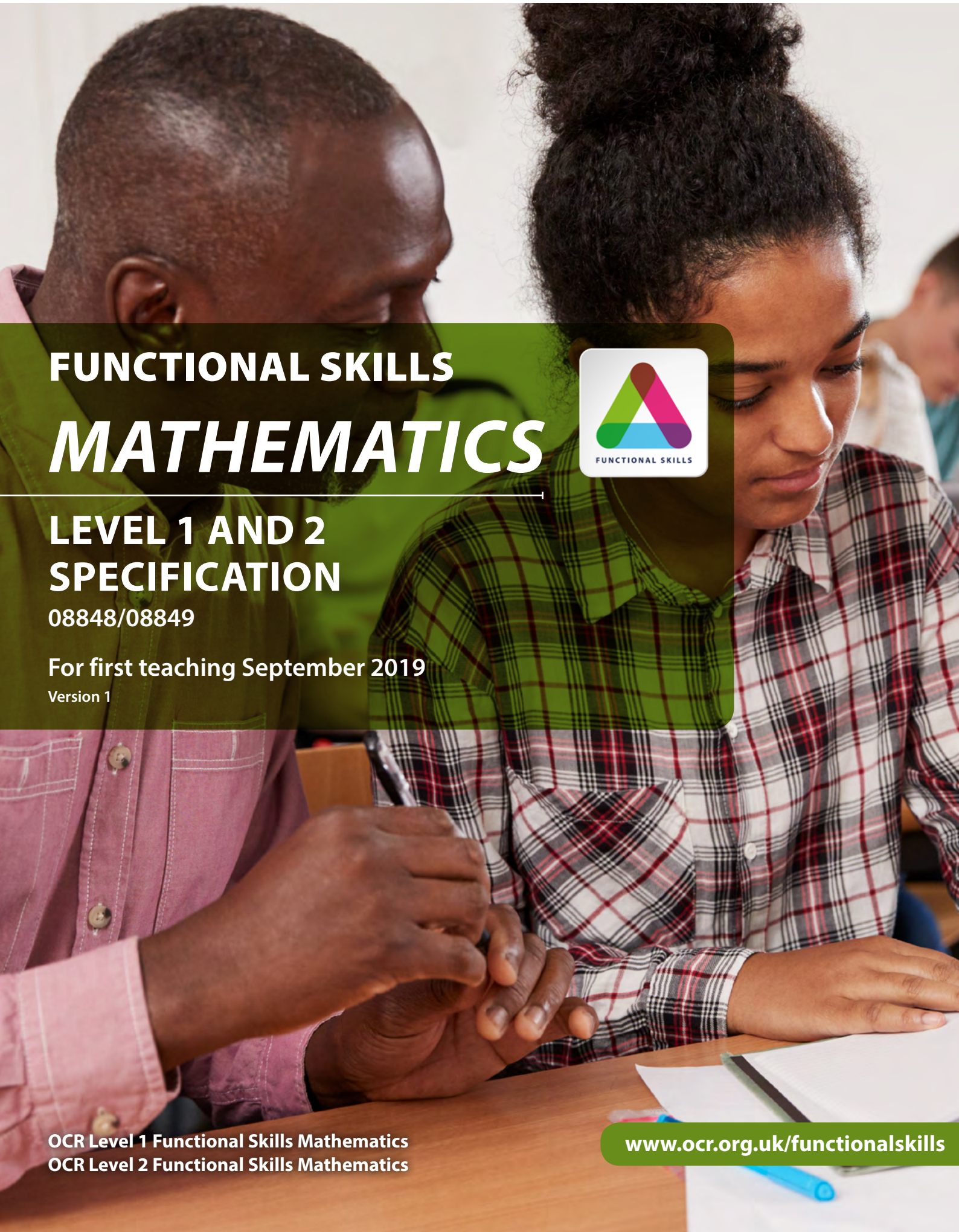

FUNCTIONAL SKILLS
MATHEMATICS

FUNCTIONAL SKILLS

LEVEL 1 AND 2 SPECIFICATION

08848/08849

For first teaching September 2019

Version 1

OCR Level 1 Functional Skills Mathematics
OCR Level 2 Functional Skills Mathematics

www.ocr.org.uk/functionalskills

Contents

1. Qualification overview

1.1. OCR Level 1 Functional Skills Mathematics at a glance

Qualification number	603/4651/6	**OCR Entry code**	08848
First entry date	01/09/2019	**Approved age range**	14+
Guided learning hours (GLH)	55		
Total qualification time	55		
This qualification is suitable for learners	• aged 14+ on a full-time study programme who wish to develop underpinning and problem solving skills in mathematics • who want to progress in their learning • as it has been designed to meet the Department for Education's characteristics for Functional Skills mathematics.		
Entry requirements	There are no formal entry requirements for this qualification.		
Qualification structure	This qualification contains one mandatory unit.		
Assessment method/model	This qualification is assessed by an examination.		
Exam series	On demand.		
Grading	This qualification is pass/fail.		
Last entry date	This qualification will continue to be available for entries and certification until we decide it needs to be withdrawn. If we're going to withdraw a qualification we'll set an end date for entries and certification and we'll tell you what the arrangements are for the last date to enter learners and make claims for certificates. When we set end dates, you'll be able to see these on the Register of Regulated Qualifications.		

1.2. OCR Level 2 Functional Skills Mathematics at a glance

Qualification number	603/4650/4	**OCR Entry code**	08849
First entry date	01/09/2019	**Approved age range**	14+
Guided learning hours (GLH)	55		
Total qualification time	55		
This qualification is suitable for learners	• aged 14+ on a full-time study programme who wish to develop underpinning and problem solving skills in mathematics • who want to progress in their learning • as it has been designed to meet the Department for Education's characteristics for Functional Skills mathematics.		
Entry requirements	There are no formal entry requirements for this qualification.		
Qualification structure	This qualification contains one mandatory unit.		
Assessment method/model	This qualification is assessed by an examination.		
Exam series	On demand.		
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1.3. Qualification purpose

Functional Skills qualifications should provide reliable evidence of a learner's achievements against demanding content that is relevant to the workplace. They need to provide assessment of learners underpinning knowledge as well as their ability to apply this in different contexts. They also need to provide a foundation for progression into employment or further technical education and develop skills for everyday life. In some contexts, Functional Skills qualifications will also play a part in the Government's accountability systems.

Functional Skills mathematics qualifications should enable the learner to gain confidence and fluency in and a positive attitude towards mathematics, and to develop behaviours such as persistence and logical thinking as they apply mathematical tools and approaches.

Purpose of Level 1 and Level 2 Functional Skills in Mathematics:

A qualification for work, study and life. Achievement of the qualification demonstrates a sound grasp of mathematical skills at the appropriate level and the ability to apply mathematical thinking effectively to solve problems successfully in the workplace and in other real life situations.

2. Introduction

The information provided in this specification is correct at the time of production. Occasionally we may update it so please check the qualification webpage for the most up-to-date information.

This specification contains what you need to know about the planning, delivery and assessment of these qualifications. Staff involved in the delivery of these qualifications must have access to and understand the requirements in this specification.

To access information on how to administer these qualifications please follow the link to the Administration area www.ocr.org.uk/administration/.

You should ensure learners are informed of the title and level of the qualification they have been entered for and that Oxford Cambridge and RSA Examinations (OCR) is the awarding body for their chosen qualification.

2.1. Why choose Functional Skills mathematics

These qualifications will equip your learners with the functional skills required for day-to-day life, education and work.

The aim of these qualifications is to give learners the opportunity to:

- develop an understanding of Functional Skills mathematics at Level 1 and 2
- develop their skills and competences in mathematics
- achieve a nationally recognised qualification
- prepare for employment
- progress to further study.

2.2. Entry requirements

There are no formal entry requirements for these qualifications.

There is no requirement for any specific prior learning. We recommend that an initial assessment should take place to ensure the learner is capable of reaching the required standards.

All staff involved in the assessment or delivery of these qualifications should understand the requirements of the qualifications and match them to the needs and capabilities of individual learners before entering them for the qualifications.

These qualifications have been developed so they are free from any barriers that restrict access or progression and therefore, promotes equal opportunities.

These qualifications are regulated for learners aged 14 years and over.

2.3. Availability and Funding

These qualifications are regulated by Ofqual and are available in England only.

Funding arrangements can be subject to change. For the latest details about approval and funding eligibility, we recommend you visit the following websites:

- Register of Regulated Qualifications – Ofqual's register of regulated qualifications
- Department for Education (DfE) Section 96 – for confirmation of the approval of qualifications to be delivered to specific age ranges
- Education and Skills Funding Agency for funding education and training for children, young people and adults in England

Use the Ofqual Qualification Number (QN) when you're looking for information on qualification eligibility for public funding.

If you have any queries about funding for this qualification email us at funding@ocr.org.uk.

2.4. Qualification size

The size of each qualification is described in terms of Guided Learning Hours (GLH) and Total Qualification Time (TQT).

GLH indicates the approximate time (in hours) that the learner will be supervised during any teaching, learning or assessment activities. We have worked with people who are experienced in delivering the qualification to determine what content needs to be taught and how long it will take to deliver.

TQT is comprised of two elements: GLH, and an estimate of the number of hours a learner will reasonably spend on any unsupervised learning or assessment activities (including homework) so they can successfully achieve their qualification.

These qualifications require a minimum of 55 GLH and 55 TQT.

3. Structure and content

3.1. Qualification structure

OCR Level 1 Functional Skills Mathematics (Qualification Number 603/4651/6)

This qualification contains one mandatory unit (Unit Reference Number T/617/3592)

OCR Level 2 Functional Skills Mathematics (Qualification Number 603/4650/4)

This qualification contains one mandatory unit (Unit Reference Number A/617/3593)

3.2. Learning aims and outcomes

Functional Skills mathematics qualifications at these levels should:

- indicate that learners can demonstrate their ability in mathematical skills and their ability to apply these, through appropriate reasoning and decision making, to solve realistic problems of increasing complexity
- introduce learners to new areas of life and work so that they are exposed to concepts and problems which, while not of immediate concern, may be of value in later life
- enable learners to develop an appreciation of the role played by mathematics in the world of work and in life generally.

3.3. Teaching and Learning

Wherever possible, tutors should tailor learning programmes to meet individual learner needs. It is recommended that centres should adopt a holistic approach to the delivery of these qualifications and identify opportunities to link OCR Functional Skills mathematics to other areas of the curriculum.

We strongly advise that teaching and development of subject content and associated skills be referenced to real life situations. The practical skills prescribed in the Functional Skills criteria should form the basis of the individualised learner programme.

You should ensure that learners' are fully prepared for OCR Functional Skills mathematics assessment through appropriate teaching and learning strategies. You are encouraged to ensure they have the opportunity to practice their subject skills in real-life contexts prior to taking the assessment unit format.

The mathematics standards are essentially concerned with developing and recognising the ability of learners to apply and transfer skills in ways that are appropriate to their situation. For mathematics to be useful, learners must have the skills and confidence to apply, combine and adapt their mathematics knowledge to new situations in their life and work. The capacity to identify and understand the role that mathematics plays in the world is crucial in enabling them to function as effective citizens.

3.3.1 Problem Solving and Underpinning Skills

The mathematical problem solving aspect of the OCR Functional Skills mathematics qualification is a core element. The following aspects will also be assessed in their own right:

- Underpinning skills - 25%
- Problem solving – 75%.

Underpinning skills may be presented either in a given context or in the abstract, without a context. Where a question assessing underpinning skills is presented in a context, the context does not undermine the targeting of the relevant skills.

Problem solving will not obscure or add additional mathematical complexity beyond the relevant level of the OCR Functional Skills mathematics qualification.

The table below summarises the number of steps involved as well as a general expectations around the learners' abilities.

	Learners should be able to…		**The context within which each question or task is set…**
	recognise and obtain…	**address individual problems…**	
Level 1	a solution or solutions to a **straightforward** problem, i.e. one that requires learners to **either** work through **one** step or process, or to work through **more than one** connected step or process	some of which draw upon a combination of **any two** of the three areas from the subject content and require learners to **make connections** between those content areas	will require some **comprehension** in order to independently identify and carry out an appropriate mathematical approach
Level 2	a solution or solutions to a **complex** problem, i.e. one which requires a **multistep** process, typically requiring planning and working through **at least two** connected steps or processes	some of which draw upon a combination of **all three** areas from the subject content and require learners to **make connections** between those content areas	will require **interpretation and analysis** in order to independently identify and carry out an appropriate mathematical process or processes

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3.4. Subject Content

The subject content describes the criteria against which learners will be assessed. At each level, the subject content subsumes the previous level's subject content and coverage and range, supporting a progression-based suite of qualifications.

The OCR Functional Skills mathematics qualifications at Level 1 and Level 2 assess all of the subject content and sample the coverage and range.

At **Level 1** the context may be less familiar than at Entry Level but still accessible to the learner. The mathematics demanded is clear but with some non-routine aspects to the situation or problem. Methods and procedures may require selection and an organised approach. Models need to be selected and adapted. Guidance is provided but autonomous decisions are required to find solutions.

At **Level 2** the context is unfamiliar to the learner and the situation or problem needs to be identified. The mathematics demanded may not be obvious in all situations and there will be non- routine aspects to the situation or problem. Methods may involve several steps and require identification of underlying mathematical structures and ways of describing them. Guidance may be provided but choices are independently made and evaluated.

The subject content reference code e.g. L1N1. comprises of the Level of the qualification, the content area and the statement numbered from the Department for Education document 'Subject content functional skills: mathematics'.

L1 = Level 1

L2 = Level 2

N = Using numbers and the number system – whole numbers fractions, decimals and percentages

M = Using common measures, shape and space

D = Handling information and data

1, 2, 3,…= The numbers from the Department for Education document 'Subject content functional skills: mathematics'

Note: if a lowercase letter ('a', 'b', 'c', …) is present at the end of the code, this means the subject content has been divided into sub-parts.

Using numbers and the number system – whole numbers, fractions, decimals and percentages

Level 1 content guidance

Learners at Level 1 are expected to be able to count in steps of various sizes, including negative numbers; read, write and understand positive whole numbers to one million. They can order and compare whole numbers of any size, and fractions, ratios and decimals and recognise the effect of multiplying and dividing by powers of 10, 100 and 1000. They can identify, compare and extend a range of numerical and spatial patterns, use, understand and calculate with fractions, decimals and percentages and calculate simple interest. For specific content on numbers and the number system - see column 2 in the table below (page 12- 14).

Level 2 content guidance

Learners at Level 2 are expected to be able to use numbers of any size; read, write and make use of positive and negative integers of any size; use, order and compare integers, fractions, decimals, percentages and ratios as well as recognise the value of a digit in any whole or decimal number. They can use numerical and spatial patterns for a purpose and calculate with, and convert between, numbers written as fractions, decimals, percentages and ratios. For specific content on numbers and the number system – see column 3 in the table below (page 12- 14).

Topic area	Level 1 Learners should be able to…	Level 2 Learners should also be able to…
Number basics	Read, write, order and compare large numbers (up to one million). (L1N1)	Read, write, order and compare positive and negative numbers of any size. (L2N1)
	Recognise and use positive and negative numbers. (L1N2)	
The four operations	Multiply and divide whole numbers and decimals by 10, 100 and 1000. (L1N3)	Carry out calculations with numbers up to one million, including strategies to check answers (including estimation and approximation). (L2N2)
	Use multiplication facts and make connections with division facts. (L1N4)	
	Follow the order of precedence of operators. (L1N7)	Follow the order of precedence of operators, including indices. (L2N12)
Indices	Calculate the squares of one-digit and two-digit numbers. (L1N6)	
Approximating	Approximate by rounding to a whole number or to one or two decimal places. (L1N12)	(See Topic area The four operations, L2N2 and also Topic area Fractions, decimals and percentages, L2N9)
	Estimate answers to calculations using fractions and decimals. (L1N15)	

Topic area	Level 1 Learners should be able to…	Level 2 Learners should also be able to…
Fractions, decimals and percentages	Recognise and calculate equivalences between common fractions, percentages and decimals, including halves, thirds, quarters, fifths and tenths. (L1N16)	Identify and know the equivalence between fractions, decimals and percentages. (L2N4) (See Topic area Probability, L2D27)
	Read, write, order and compare common fractions and mixed numbers. (L1N8)	Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers. (L2N7)
	Find fractions of whole number quantities or measurements. (L1N9)	Express one number as a fraction of another. (L2N8)
	Read, write, order and compare decimals up to three decimal places. (L1N10)	Order, approximate and compare decimals. (L2N9)
	Add, subtract, multiply and divide decimals up to two decimal places. (L1N11)	Add, subtract, multiply and divide decimals up to three decimal places. (L2N10)
	Read, write, order and compare percentages in whole numbers. (L1N13)	
	Calculate percentages of quantities. (L1N14a)	Work out percentages of amounts and express one amount as a percentage of another. (L2N5)

Topic area	Level 1 Learners should be able to…	Level 2 Learners should also be able to…
Fractions, decimals and percentages (contd…)	Calculate simple percentage increases and decreases by 5% and multiples thereof. (L1N14b)	Calculate percentage change (any size increase and decrease). (L2N6a)
		Calculate the original value after percentage change. (L2N6b)
Ratio and proportion	Work with simple ratio and direct proportions. (L1N17)	Understand and calculate using ratios, direct proportion and inverse proportion. (L2N11)
Formulae	Use simple formulae expressed in words for one or two-step operations. (L1N5)	Evaluate expressions and make substitutions in given formulae in words and symbols. (L2N3)

Using common measures, shape and space

Level 1 content guidance

Learners at Level 1 are expected to be able to work out simple relationships between common units of measurement to define quantities, also involving mathematical terms for position and direction. They can apply and use calculations with common measures including money, time, length, weight and capacity. They can visualise, draw and describe 2-D and 3-D shapes and use properties of 2-D shapes in calculations. For specific content on common measures, shape and space – see column 2 in the table below (page 16-17).

Level 2 content guidance

Learners at Level 2 are expected to be able to handle relationships between measurements of various kinds, use angles and coordinates when involving position and direction and make use of geometric properties in calculations with 2-D and 3-D shapes and understand the relationships between them. For specific content on measures, shape and space – see column 3 in the table below (page 16-17).

Topic area	Level 1 Learners should be able to…	Level 2 Learners should also be able to…
Money	Calculate simple interest in multiples of 5% on amounts of money. (L1M18)	Calculate amounts of money, compound interest, percentage increases, decreases and discounts, including tax and simple budgeting. (L2M13)
	Calculate discounts in multiples of 5% on amounts of money. (L1M19)	
Units and measures	Convert between units of length, weight, capacity, money and time, in the same system. (L1M20)	Convert between metric and imperial units of length, weight and capacity using (1) a conversion factor and (2) a conversion graph. (L2M14)
		Calculate using compound measures, including speed, density and rates of pay. (L2M15)
Shapes		Calculate values of angles and/or coordinates with 2-D and 3-D shapes. (L2M22)
	Calculate the area and perimeter of simple shapes, including those that are made up of a combination of rectangles. (L1M22)	Calculate the perimeters and areas of 2-D shapes, including triangles, circles and composite shapes that include non-rectangular shapes (formulae will be given except for triangles and circles). (L2M16)
	Calculate the volume of cubes and cuboids. (L1M23)	Use formulae to find volumes and surface areas of 3-D shapes, including cylinders (formulae to be given for 3-D shapes other than cylinders). (L2M17)

Topic area	Level 1 Learners should be able to…	Level 2 Learners should also be able to…
Representations	Recognise and make use of simple scales on maps and drawings. (L1M21)	Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements. (L2M18)
	Interpret plans, elevations and nets of simple 3-D shapes. (L1M25)	Understand and use common 2-D representations of 3-D objects. (L2M20)
	Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles. (L1M24)	Draw 3-D shapes, including plans and elevations. (L2M21)
Coordinates		Use coordinates in 2-D, positive and negative, to specify the positions of points. (L2M19) (See Topic area Shapes, L2M22)
Angles	Use angles when describing position and direction. Measure angles in degrees. (L1M26) (See Topic area Representations, L1M24)	(See Topic area Shapes, L2M22)

Handling information and data

Level 1 content guidance

Learners at Level 1 are expected to be able to select, construct and interpret a range of statistical diagrams in various contexts; select and use methods and forms to present and describe outcomes. They can extract and interpret information from tables, diagrams, charts and graphs; apply simple statistics and recognise features of charts to summarise and compare sets of data; recognise and use the probability scale and interpret probabilities. For specific content on information and data – see column 2 in the table below (page 19).

Level 2 content guidance

Learners at Level 2 are expected to be able to construct, interpret and evaluate a range of statistical diagrams. They can calculate and interpret probabilities. They can calculate, analyse, compare and interpret appropriate data sets, tables, diagrams and statistical measures such as common averages (mean, median, mode) and spread (range), and use statistics to compare sets of data. They can identify patterns and trends from data as well as recognise simple correlation. For specific content on information and data see column 3 in the table below (page 19).

Topic area	Level 1 Learners should be able to…	Level 2 Learners should also be able to…
Summary statistics	Find the mean and range of a set of quantities. (L1D29)	Calculate the median and mode of a set of quantities. (L2D23)
		Estimate the mean of a grouped frequency distribution from discrete data. (L2D24)
		Use the mean, median, mode and range to compare two sets of data. (L2D25)
Charts and tables	Represent discrete data in tables, diagrams and charts, including pie charts, bar charts and line graphs. (L1D27)	Draw and interpret scatter diagrams and recognise positive and negative correlation. (L2D28)
	Group discrete data and represent grouped data graphically. (L1D28)	
Probability	Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events. (L1D30)	
	Use equally likely outcomes to find the probabilities of simple events and express them as fractions. (L1D31)	Work out the probability of combined events, including the use of diagrams and tables (including two-way tables). (L2D26)
		Express probabilities as fractions, decimals and percentages. (L2D27)

3.4.1 Solving mathematical problems and decision making guidance

Level 1

Learners should to be able to use the knowledge and skills listed below (page 21) to recognise and obtain a solution or solutions to a **straightforward problem**.

A **straightforward problem** is one that requires learners to either work through one step or process or to work through more than one connected step or process.

Individual problems are based on the knowledge and/or skills in the mathematical content areas (number and the number system; common measures, shape and space; information and data). At Level 1 it is expected that the learner will be able to address individual problems, some of which draw upon a combination of any **two** of the mathematical content areas and require learners to make connections between those content areas.

Level 2

Learners should be able to use the knowledge and skills listed below (page 21) to recognise and obtain a solution or solutions to a **complex problem**.

A **complex problem** is one which requires a multistep process, typically requiring planning and working through at least two connected steps or processes.

Individual problems are based on a combination of the knowledge and/or skills from the mathematical content areas (number and the number system; measures, shape and space; information and data). At Level 2 it is expected that the learner will be able to address individual problems some of which draw upon a combination of all **three** mathematical areas and require learners to make connections between those content areas.

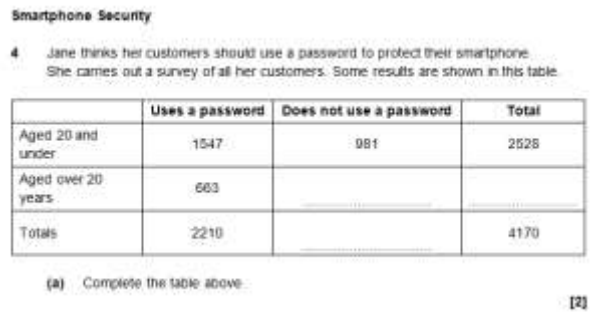
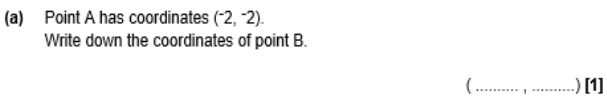
	Level 1	Level 2
Learners should be able to:	P1. Read, understand and use mathematical information and mathematical terms used at this level P2. Address individual problems as described above P3. Use knowledge and understanding to a required level of accuracy P4. Analyse and interpret answers in the context of the original problem P5. Check the sense, and reasonableness, of answers P6. Present results with appropriate explanation and interpretation demonstrating simple reasoning to support the process and show consistency with the evidence presented The context of individual problems at this level will require some comprehension in order for the learners to be able to independently identify and carry out an appropriate mathematical approach.	P1. Read, understand, and use mathematical information and mathematical terms P2. Address individual problems as described above P3. Use knowledge and understanding to a required level of accuracy P4. Identify suitable operations and calculations to generate results P5. Analyse and interpret answers in the context of the original problem P6. Check the sense and reasonableness of answers P7. Present and explain results clearly and accurately demonstrating reasoning to support the process and show consistency with the evidence presented The context of individual problems at this level will require interpretation and analysis in order for the learners to be able to independently identify and carry out an appropriate mathematical process or processes.

3.5. Assessment command words

The meanings of **some** instructions and words used in the OCR Functional Skills mathematics qualifications are detailed below.

Words specific to the subject content will have their standard mathematical meaning. Examples include, but are not limited to, 'convert, 'simplify', 'round', 'order' or 'estimate'.

Other command words will have their ordinary English meaning. Examples include, but are not limited to, 'find, 'calculate', 'how many' or 'how long'.

Word	Description	Example
Tick	Learners should respond with a tick (✓) to indicate their answer (or answers, if appropriate) from a list of possible answers**.** On the Computer-based test this will be replaced with '**Select**'.	
Complete	A part-completed calculation, table, chart, diagram or similar is provided and learners should respond by completing the provided calculation, table, chart, diagram or similar.	
Write down/State	These command words indicate that no working is required to be provided.	

Word	Description	Example
Use your answer from/ to…	This statement will be used when the learner is recommended to use their answer from the stated question in their solution. Marks can be awarded for their process, even if the previous answer was incorrect.	(ii) Jane wants to calculate an estimate of the value of the smartphones. She makes some assumptions about the smartphones. • They are cuboid in shape measuring 15 cm by 7 cm by 1 cm. • They will completely fill the cone to the top with no empty space. • A smartphone is worth about £200. Use your answer to part (a)(i) and Jane's assumptions to calculate an estimate of the value of the smartphones in the cone. Give your answer to a sensible accuracy. £ ..... [5]
Is he/she correct?	These questions will always require a yes/no answer along with detailed workings to show how this decision was reached. The command '**Show how you decide**' will also be included to remind learners of the requirements.	(b) Jane says that the **screen size** is directly proportional to the screen area. She collects this information. **Screen size (inches)**: 3.5, 4.0, 4.5, 5.0, 7.0, 8.0, 10.0 **Screen area (square inches)**: 5.23, 6.84, 8.65, 10.68, 20.94, 27.36, 42.73 Is Jane correct? Show how you decide Is she correct?..... [3]
Show your working	Full marks are not available for only stating the answer for these questions. Full working out must be clearly shown.	(b) Find the coordinates of a point C, so that the triangle ABC has an area of 12 cm^2 squares. Show your working (....., ...) [2]

4. Assessment

4.1. Overview of the assessment

Entry code	Qualification title	GLH	Reference
08848	**OCR Level 1 Functional Skills Mathematics**	**55**	**603/4651/6**
Made up of one mandatory unit (Ofqual unit number: T/617/3592)			
1 hour 20 minutes written examination (Calculator paper) 30 minutes written examination (Non-calculator paper) Total 80 marks: • 60 marks (Calculator paper) • 20 marks (Non-calculator paper) OCR-set and marked Awarded Pass/Fail	This consists of **two** question papers. • Calculator paper – comprising of short answer, extended response and objective response questions • Non-calculator paper – comprising of short answer, extended response and objective response questions.		

Entry code	Qualification title	GLH	Reference
08849	**OCR Level 2 Functional Skills Mathematics**	**55**	**603/4650/4**
Made up of one mandatory unit (Ofqual unit number: A/617/3593)			
1 hour 20 minutes written examination (Calculator paper) 30 minutes written examination (Non-calculator paper) Total 80 marks: • 60 marks (Calculator paper) • 20 marks (Non-calculator paper) OCR-set and marked Awarded Pass/Fail	This consists of **two** question papers. • Calculator paper - comprising of short answer, extended response and objective response questions • Non-calculator paper – comprising of short answer, extended response and objective response questions.		

4.2. Initial assessment of learners

It is important that your centre carries out an initial assessment to identify learners' levels of competence, knowledge and understanding and any potential gaps that need to be addressed.

4.3. How these qualifications are assessed

At Level 1 and 2, assessment is by a paper-based or on-screen test which is set by us and externally assessed by our Examiners.

Assessment focuses on the two interrelated skills identified in the subject content:

- 25% Underpinning skills
- 75% Problem solving skills.

All assessments take place under examination conditions, as specified in our *OCR Instructions for conducting examinations (OCR ICE)* which is available on our website.

The assessment allocated time is 1 hour 50 minutes and total marks is 80 marks. The assessment for the papers must be split as follows:

Paper type	Time		Number of marks	Weighting
Calculator Paper	1 hour 20 minutes		60 marks	75%
Non-calculator paper	30 minutes		20 marks	25%

The calculator paper should be taken first to allow for the collection of the calculator paper(s) alongside the calculator(s), prior to the distribution and learners taking of the Non-calculator paper(s).

4.3.1 Paper-based assessments

Assessments are available on demand as a paper-based assessment.

You may enter learners for paper-based assessment at any time. Papers will be despatched to centres per daily cohort of entries and must be taken on the date identified.

The externally assessed paper-based assessments are distributed by secure post to your centre for each daily cohort of learner entries, and should be stored within centres as per our *OCR Instructions for conducting examinations (OCR ICE)* which is available on our website.

4.3.2 On-screen assessments

Assessments are available on demand as an on-screen assessment.

The externally assessed on-screen assessments are made available to approved centres registered in the test delivery system. Once available, centres can schedule tests to take place on a set date at any time. For more details refer to the Administration area, certificates, http://www.ocr.org.uk/administration/.

You are responsible for timetabling Functional Skills tests. You can timetable tests back- to-back and hold tests for more than one qualification on the same day.

4.3.3 Scheduling the assessment

All assessments must be taken on the specified day and for paper-based assessments, all learners must sit the specific variant of the assessment indicated on the attendance list. It is expected that centres will schedule paper-based exams in one sitting on that date. Centres must take every reasonable action to ensure that staff and learners do not engage in any unfair or dishonest practice before, during or after the assessment that would result in any candidate having an unfair advantage over another candidate, or being at a disadvantage. One way to manage this is to schedule the assessment so that all learners who are taking the assessment on the same day are sitting the assessment at the same time. Other steps are acceptable provided the security of the paper is maintained. Unfair and dishonest practice would include, but not be limited to:

- learners communicating or attempting to communicate the contents of their assessment with anyone
- learners who are due to sit the same assessment after their peers trying to elicit information on the content of the assessment.
- publishing the content of the assessment, or inferences as to the content of the assessment, unless authorised by OCR.

Learners should be informed of these instructions before the day of the assessment and invigilators should remind learners at the beginning of each assessment that they are not permitted to communicate the content of the assessments with others.

Assessment materials must remain in their sealed packets in secure storage and only removed to be taken to the examination room 1 hour before the first assessment. If circumstances are such that a packet of assessments needs to be split, i.e. assessments are taking place at a number of venues or at different times of the day, as few packets as possible should be opened and the sealed assessment packet must be opened in the secure room and not in the examination room. The assessments extracted from the sealed packet must be placed in an envelope which is then sealed and transported securely to the allocated room or satellite venue(s). The assessment packet with the remaining assessments must be re-sealed and placed back in the centre's secure storage facility, and only re-opened and removed from the secure storage 1 hour before the next scheduled assessment.

4.4. Assessment instructions and information

The information and instructions provided on the front cover of the assessments may slightly differ depending on the mode of assessment (paper based or on-screen) and the type of paper the learner is completing (e.g. calculator or non-calculator).

In addition to the detail provided on the front covers, you must ensure that the following is adhered to when completing the assessment.

Instructions	Additional information
HB pencil	Learners should use a pencil for questions that ask them to draw or complete graphs and diagrams.
Calculator	Learners are expected to use for the calculator paper **only** a scientific or basic calculator that includes the following functions: • Four operations (+,-,×,÷) • Square (x^2) • π button • Brackets • Memory facility • Positive/negative The Calculators are subject to the rules in our *OCR Instructions for conducting examinations (OCR ICE)* which is available on our website. Learners are permitted to take a calculator into the on-screen calculator paper **only** which includes the functions listed above and complies with the rules in our *OCR Instructions for conducting examinations (OCR ICE)* which is available on our website Note: The use of calculators that link to other devices or the internet are **not** permitted.
Geometric instruments	Learners may use a ruler, a 180° or 360° protractor, set square and a pair of compasses.
Show your working for each question. Marks can be awarded for working.	Learners need to be aware that a wrong answer can gain credit if working is shown. On the calculator paper they should show the steps/operation that they input into the calculator.
Use of π	Learners can use the π button in the calculator paper **only** or take π to be 3.14 in both papers unless the question says otherwise.
Pen/pencil and paper for the on-screen assessment **only**.	Learners may use paper for rough workings, this cannot be submitted with the assessments. It is expected that learners enter all of their working on screen. Any rough working on paper must be destroyed at the end of the assessment.

4.5. Suitable to the needs of the learner

We have designed these qualifications so that achievement is accessible to all learners, in the context of the units.

For learners who have access requirements see *Arrangements for learners with access-related needs* in Section 6.10.

If you think that any aspect of these qualifications unfairly restricts access and progression, please contact our Customer Support Centre by phone: 024 76 851509 or by email at vocational.qualifications@ocr.org.uk.

4.6. Assessment structure and content

There are two papers (calculator 75% of the marks and non-calculator 25% of the marks) which learners need to complete. 60 marks are allocated to the calculator paper and 20 marks are allocated to the non-calculator paper. Subjects for the context within each paper are, as far as possible, generic and realistic in nature. Contexts are enhanced as appropriate by OCR to match the reading level of the learner. Contexts will be different for each level of assessment within the assessment session.

On every assessment occasion the assessment papers will assess all of the subject content but will sample from the coverage and range described in the unit. The mark scheme is structured to award marks against the subject content, with exemplification of expected performance where needed.

4.7. External marking

The calculator and non-calculator papers will be externally marked by OCR.

You should collate the completed papers in the following order:

1. Calculator paper
2. Non-calculator paper

Once collated, these papers should then be sent to the address provided by OCR.

4.8. Re-sits

Learners must attempt the live assessments within the time specified and under controlled assessment conditions. If learners do not meet the minimum overall pass requirement for the assessment further work will be required.

There are no limits on the number of times a learner may re-sit an individual assessment but centres must ensure that learners undertake a different variant on each occasion.

4.9. Reporting suspected malpractice

It is the responsibility of the Head of Centre1[1] to report (in writing) all cases of suspected malpractice involving centre staff or learners. A *JCQ Report of Suspected Malpractice form* (JCQ/M1), which is available to download from the JCQ website, should be completed and emailed to malpractice@ocr.org.uk.

When asked to do so by OCR, Heads of Centres are required to investigate instances of malpractice promptly and report the outcomes to OCR.

Further information can be found on our website https://www.ocr.org.uk/administration/stage-3-assessment/malpractice/

[1]The Head of Centre is defined as the most senior officer in the organisation, directly responsible for the delivery of OCR qualifications, e.g. the Principal of a College, the Head Teacher of a school, the Managing Director of a Private Training Provider or the Group Training Manager of a major company.

5. Support

5.1. Free resources

The following materials are available on our website:

- Mapping documents
- Exploring the design of our question papers
- Delivery Guides
- Learner style answers
- Sample Assessment Materials
- Practice materials (paper based and on-screen)
- Scheme of work.

5.2. Endorsed publications

OCR endorses a range of publisher materials to provide quality resources for centres delivering its qualifications. To see any endorsed resources relevant to these qualifications please go to the subject page on the OCR website.

5.3. Our professional development programme (CPD)

As part of our teacher training we offer a broad range of courses. We're constantly looking for ways to improve the support we offer you and to make our professional development programme more accessible and convenient to all.

To find out more about professional development, please visit our website.

5.4. Documents and links

Our publications

Please go to www.ocr.org.uk/administration/ for further information on the following:

- making entries for Functional Skills
- making claims for Functional Skills qualifications
- conducting on-screen tests
- Instructions for Conducting Examinations
- results and certificates
- querying results

For JCQ Publications please go to www.jcq.org.uk for information on the following:

- Access Arrangements, Reasonable Adjustments and Special Consideration
- Suspected Malpractice in Examinations and Assessments

Ofqual – www.gov.uk/government/organisations/ofqual

DfE – www.gov.uk/government/organisations/department-for-education

5.5. Results Reports

A number of results reports will be available in Surpass, our on-screen testing system. These will be available to all centres offering the Functional Skills qualifications for both on-screen or paper-based assessments.

To access these you will need a Surpass account, go to the Test Administration, then Results screen. Here you will be able to view your candidates' results and generate reports as PDF files, which can be downloaded.

There are five reports available as follows:

- Candidate report
- Summary
- Candidate breakdown
- Test breakdown
- Results slip

Further information about these reports can be found in Appendix A.

6. Administration and other Information

6.1. Administration

For information on how to administer these qualifications please follow the link to OCR's Administration area, www.ocr.org.uk/administration/.

You will find all the details about how these qualifications runs, what you need to do and when. It covers everything from becoming an OCR centre, to making entries, claiming certificates, special arrangements and contacting us for advice.

6.2. Unique Learner Numbers (ULN) and the Personal Learning Record (PLR)

This is a personal ten-digit number, which is used to ensure learner achievement information can be provided to their Personal Learning Record (PLR). ULNs are provided and administered by the Learning Records Service (LRS).

Learners over the age of 14 in UK education or training can access the PLR using their ULN. Learners keep the same ULN to access their PLR throughout their lives and whatever their level of learning.

Learners that claim certification for publically funded qualifications must have a valid ULN.

Where a learner has a ULN, you must enter their ten digit number in the ULN field when making entries via Interchange. For learners who do not have a ULN, a claim will still be accepted if you leave this field blank, but OCR will not be able to send these achievements to the PLR.

Further information about this can be found in the Administration area and at the Learner Records Service.

6.3. Claiming certificates

These are single unit qualifications. Learners who achieve a pass for the unit will be awarded the appropriate certificate, giving the full qualification title.

OCR Level 1 Functional Skills Mathematics

OR

OCR Level 2 Functional Skills Mathematics

Learners who do not meet the criteria for a pass, will be issued with a result of fail.

Certificates will be issued directly to centres for successful learners. In order to ensure that these are automatically issued, you must ensure that the OCR learner number is **always** used where a learner has already achieved one or more units. For more details refer to the Administration area, certificates, http://www.ocr.org.uk/administration/.

6.4. Enquiries about results

Under certain circumstances, you may wish to query the result(s) issued to one or more learners.

To find out more about this, please refer to the JCQ Post-Results Services booklet and the Administration area, post results services, http://www.ocr.org.uk/administration/.

6.5. Replacement certificates

For details on replacement certificates refer to the Administration area, certificates, http://www.ocr.org.uk/administration/.

6.6. Avoidance of bias

We have taken great care in the preparation of these qualifications to avoid bias of any kind. Special focus is given to the eight strands of the Equality Act with the aim of ensuring direct and indirect discrimination is avoided.

6.7. Regulatory requirements

These qualifications comply with Ofqual's *Functional Skills Mathematics Conditions and Requirements* and Department for Education's *Functional Skills Mathematics Subject Content.*

6.8. Mode of delivery

You are free to deliver these qualifications using any mode of delivery that meets the needs of your learner. Whatever mode of delivery is used, you must ensure that learners have appropriate access to the resources.

You should consider the learners complete learning experience when designing learning programmes. This is particularly important where learners are studying part time alongside work commitments as they may bring with them a wealth of experience that should be utilised to maximum effect by your staff.

We do not specify the mode of study or a time limit for the achievement of these qualifications other than the last entry/last certification dates. We will notify you at least six months before the qualification closes for entries and this information will be available on Ofqual's register of regulated qualifications and our last entry/certification notification.

6.9. Centre resources and requirements

Centres must provide appropriate assessment facilities for learners that comply with our regulations stated in the *OCR Instructions for Conducting Examinations* which is available to download from the Administration area of our website. This document is reviewed annually and republished each September.

Centres must ensure the learners have the correct resources in order to complete the assessment. For further information please see section. 4.4.

Sample assessment material for the OCR Level 1 and 2 Functional Skills Mathematics is available to download from our website www.ocr.org.uk. Centres can use these sample assessments as practice papers to prepare learners for the final assessment.

Practice papers will also be available on the qualification webpage.

6.10. Arrangements for learners with access-related needs

In line with the guidance provided by Ofqual for Functional Skills, learners can have access to all forms of equipment and software that constitute their normal way of working. However, these must not affect the reliability or validity of assessment outcomes or give the learner an assessment advantage over other learners undertaking the same or similar assessments.

Centres must apply to the OCR Special Requirements team for access arrangements that require exam board approval using an OCR Access Arrangements Form (available on the OCR website). Several arrangements are centre delegated i.e. these do not require OCR approval. Details of selected arrangements can be seen in the table later in this section, but full details are available on the OCR website.

To place an order for modified papers for the Level 1 or Level 2 on-demand Mathematics papers, complete the OCR Modified Paper Order Form and email it to modified.papers@ocr.org.uk.

The access arrangements permissible for use in this qualification are as follows:

(Where there is an asterisk * please see notes as there may be exceptions).

Arrangements	Yes/No	Type of assessment
Reader (OCR approval required)	Yes	Permitted in all sections of Mathematics assessments for candidates with OCR approval.
Scribe (OCR approval required)	Yes	Permitted in all sections of Mathematics assessments for candidates with OCR approval.
PC (Centre delegated)	Yes	
Practical Assistant (OCR approval required)	Yes	A practical assistant can operate a calculator following a candidate's instructions. A candidate can be supported to use a ruler, compass or other equipment. A candidate can only be given credit for their own work. Any work or task done entirely by a practical assistant cannot earn the candidate marks.
Transcripts	No*	Only permitted when submitting scripts of candidates who have answered in Braille, where a transcript is mandatory.
Communicator/signer (Centre delegated)	Yes	
Supervised rest break (Centre delegated)	Yes	
Modified question papers (including Braille)	Yes	Can be ordered for paper-based assessments.
Extra time (see notes)	Yes	Up to 25% extra time can be granted by the centre based on evidence of need. Amounts greater than 25% need to be applied for to gain OCR approval.
Calculator (Centre delegated)	Yes*	Except not in the "non-calculator" section as indicated within a question paper.
Dictionaries/bilingual dictionaries (Centre delegated)	Yes	
External Device to load personal settings (Centre delegated)	Yes	Permitted as a reasonable adjustment provided this does not compromise the assessment or give the candidate any advantage not available to other candidates

If a candidate has complex needs and requires an adjustment not listed here. Please contact srteam@ocr.org.uk to discuss whether a reasonable adjustment can be agreed to put in place for the candidate.

7. Contacting us

7.1. Feedback and enquiries

We aim to provide consistently great customer service and your feedback is invaluable in helping us to achieve our goal. For questions about our qualifications, products and services, please contact the Customer Support Centre. To leave your feedback on the OCR website, people and processes please use our feedback form.

Write to: Customer Support Centre
OCR
Progress House
Westwood Way
Coventry
CV4 8JQ

Telephone: 024 76 851509
Fax: 024 76 421944
Email: vocational.qualifications@ocr.org.uk

Alternatively, you could visit OCR's website at www.ocr.org.uk for further information about OCR qualifications.

7.2. Complaints

We are committed to providing a high quality service but understand that sometimes things can go wrong. We welcome your comments and want to resolve your complaint as efficiently as possible. To make a complaint please follow the process set out on our website.

APPENDIX A

Report type	Information contained	How to create the report
Candidate report	For each candidate, a combination of the following: • Summary • Candidate breakdown and • Results slip reports.	To create a report for each candidate at a time, you will need to: • double click on the candidate's result or highlight the candidate's result • click the Candidate Report button.
Summary	For one or more candidates: • Candidate details • ULN • Reference • Test date • Results.	To create a report for one or more candidates, you will need to: • highlight their result • click the Summary button. or • Use a report wizard to create a report for up to 50 candidates for the same assessment over a selected time period.
Candidate breakdown	For one or more candidates' assessment, a combination of: • Summary report and • Individual results break down by problem solving and underpinning skills. This will show the percentage of marks achieved by topic area.	To create a report for one or more candidates for the same test, you will need to: • highlight their result • click the Candidate Breakdown button. or • Use a report wizard for up to 50 candidates for the same assessment over a selected time period.
Test breakdown	The report contains: • An overall results breakdown for a given assessment showing the percentage marks achieved by topic area • The results breakdown is broken down by problem solving and underpinning skills.	To create a report for given assessment, you will need to: • highlight the result for one or more candidates • click the Test Breakdown button. or • Use a report wizard for a given assessment taken by up to 50 candidates over a selected time period.
Results slip	The report contains an informal results slip for one or more candidates' assessment. Along with the candidate's details it includes the result and percentage marks achieved.	To create a report for one or more candidates, you will need to: • highlight their result • click the Results slip button. or • Use a report wizard for up to 50 candidates for the same assessment over a selected time period.

www.ocr.org.uk

OCR Customer Support Centre

Vocational qualifications
Telephone 02476 851509
Facsimile 02476 851633
Email vocational.qualifications@ocr.org.uk