Functional Skills

OCR
Oxford Cambridge and RSA

Mathematics

Centre Handbook
OCR Functional Skills qualification in mathematics at level 1 Entry code 09865
OCR Functional Skills qualification in mathematics at level 2 Entry code 09866

Contents

1   Introduction

The information provided in this handbook is correct at the time of production. Occasionally we may update this information. Please refer to the qualification webpages for the most up-to-date information.

Staff involved in the delivery of these qualifications must have access to and understand the requirements in this handbook.

You should read this document in conjunction with our *Admin guide: Functional Skills* and *Instructions for Conducting OCR Functional Skills and Cambridge Progression qualification*s.

You should ensure candidates 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.

1.1   The OCR Functional Skills suite of qualifications

Functional skills are practical skills in English, mathematics and Information and Communication Technology (ICT) that allow individuals to work confidently, effectively and independently in life.

These Functional Skills qualifications are offered at Entry level, level 1 and level 2, appear on the Register of Regulated Qualifications http://register.ofqual.gov.uk/and meet the Functional Skills criteria approved by Ofqual.

Assessment is:

- set by OCR

- available on-demand, to suit you and your candidates

- either paper-based or on-line

- externally assessed by OCR.

The assessments use and reinforce skills-based, problem-solving and learning techniques. There is more information on assessment in section 4.

Our Functional Skills qualifications in English, mathematics and ICT are designed to develop and assess Functional Skills as determined by a set of skills standards. The skills standards contained within each qualification provide candidates with knowledge, skills and a problem-solving approach that can be used in work, life and further learning.

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

1.2   Why choose Functional Skills in mathematics

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

- develop an understanding of functional skills in 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.

1.3   Entry requirement

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

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

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

See section 4.1 for more information about our free Functional Skills Level Checker.

1.4   Funding

These qualifications are regulated by Ofqual and are eligible for funding.

For further details regarding approval and funding eligibility you should refer to the following websites:

Department for Education (DfE) under Section 96 of the Learning and Skills Act 2000

Skills Funding Agency for public funding in England

DAQW – Database of Approved Qualifications for public funding in Wales

Department for Employment and Learning for public funding in Northern Ireland

Education Funding Agency http://www.education.gov.uk/aboutdfe/executiveagencies/efa for public funding information for aged 16-19 learners in England.

You should use the Qualification Number (QN) when looking for public funding for candidates.

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

1.5   Guided learning hours (GLH)

Guided learning hours indicate the approximate time (in hours) the tutor will spend supervising or directing study time and assessment. Each unit includes the GLH.

Each qualification requires the following guided learning hours:

Functional Skills qualification in mathematics at level 1	45 GLH.
Functional Skills qualification in mathematics at level 2	45 GLH.

Total Qualification Time (TQT) is 45 for each qualification.

2 Qualification summary

2.1 OCR Functional Skills qualification in Mathematics at level 1 summary

OCR entry code	09865		Qualification Number (QN)		500/8910/9
Approved age group	Pre-16	16-18	18+		19+
	✓	✓	✓		✓
This qualification is suitable for	Anyone who has achieved the entry level qualification or anyone wanting to gain a practical grounding in how to apply mathematical skills to everyday situations.				
Entry requirements	There are no formal entry requirements for this qualification.				
Structure and options	This qualification contains one mandatory unit.				
Assessment model	Assessments are paper-based or on-screen, on-demand, and are set by OCR and externally assessed by OCR Examiners. The assessment is by a paper-based or on-screen test which is externally set by us and externally assessed by our Examiners. This qualification is pass/fail.				
Last date to enter candidates	This is the operational end date in the Register of Regulated qualifications. We will always provide you with advanced notice when setting a last entry date and a last certification date.				

2.2   OCR Functional Skills qualification in Mathematics at level 2 summary

OCR entry code	09866	**Qualification Number (QN)**		500/8908/0
Approved age group	Pre-16	16-18	18+	19+
	✓	✓	✓	✓
This qualification is suitable for	Anyone who has achieved the level 1 qualification or anyone wanting to gain a practical grounding in how to apply mathematical skills to everyday situations.			
Entry requirements	There are no formal entry requirements for this qualification**.**			
Structure and options	This qualification contains one mandatory unit.			
Assessment model	The assessment is by a paper-based or on-screen test which is externally set by us and externally assessed by our Examiners. This qualification is pass/fail.			
Last date to enter candidates	This is the operational end date in the Register of Regulated qualifications. We will always provide you with advanced notice when setting a last entry date and a last certification date.			

3 Structure and content

3.1 Qualification structure

OCR Functional Skills qualification in mathematics at level 1 (Qualification Number 500/8910/9)

This qualification contains one mandatory unit (Unit Reference Number K/601/2348)

OCR Functional Skills qualification in mathematics at level 2 (Qualification Number 500/8908/0)

This qualification contains one mandatory unit (Unit Reference Number T/601/2286)

3.2 Teaching and Learning

Wherever possible, tutors should tailor learning programmes to meet individual candidate needs. It is recommended that centres should adopt a holistic approach to the delivery of this qualification and identify opportunities to link 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 candidates are fully prepared for Functional Skills assessments 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.

3.2.1 Skills standards

The skills standards describe the criteria against which candidates will be assessed. At each level, the skills standards subsume the previous level's skills standards and coverage and range, supporting a progression-based suite of qualifications.

The Functional Skills qualification in mathematics at level 1 and level 2 assesses all of the skills standards and samples the coverage and range.

The mathematics standards are essentially concerned with developing and recognising the ability of candidates to apply and transfer skills in ways that are appropriate to their situation. For mathematics to be useful, candidates 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.

At level 1 the context may be less familiar than at Entry level but still accessible to the candidate. 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 candidate 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.

3.2.2 Coverage and range

The coverage and range provides the knowledge and techniques that candidates would be expected to apply at each level. These sections are not intended as exhaustive lists to which candidates should be confined but are intended as a guide to the minimum type of content that they will need to demonstrate and apply to meet the requirements of the skills standards.

3.2.3 Assessment weightings

The assessment weightings indicate the percentage of the overall assessment that must be covered in relation to the individual skills standards. All assessments reflect the assessment weightings as outlined in the skills standards.

3.3   Level 1 Unit K/601/2348

For the level 1 qualification candidates must achieve this one mandatory unit.

Skill standards and assessment weightings	Coverage and range
Representing Assessment weighting: 30 – 40% (R1) understand practical problems in familiar and unfamiliar contexts and situations, some of which are non-routine (R2) identify and obtain necessary information to tackle the problem (R3) select mathematics in an organised way to find solutions	(N1) understand and use whole numbers and understand negative numbers in practical contexts (N2) Add, subtract, multiply and divide whole numbers using a range of strategies (N3) understand and use equivalences between common fractions, decimals and percentages (N4) add and subtract decimals up to two decimal places
Analysing Assessment weighting: 30 – 40% (A1) apply mathematics in an organised way to find solutions to straightforward practical problems for different purposes (A2) use appropriate checking procedures at each stage	(N5) solve simple problems involving ratio, where one number is a multiple of the other (N6) use simple formulae expressed in words for one- or two-step operations (G1) solve problems requiring calculation, with common measures, including money, time, length, weight, capacity and temperature (G2) convert units of measure in the same system
Interpreting Assessment weighting: 30 – 40% (I1) interpret and communicate solutions to practical problems, drawing simple conclusions and giving explanations	(G3) work out areas and perimeters in practical situations (G4) construct geometric diagrams, models and shapes (S1) extract and interpret information from tables, diagrams, charts and graphs (S2) collect and record discrete data and organise and represent information in different ways (S3) find mean and range (S4) use data to assess the likelihood of an outcome

3.4   Level 2 Unit T/601/2286

For the level 2 qualification candidates must achieve this one mandatory unit.

Skill standards and assessment weightings	Coverage and range
Representing Assessment weighting: 30-40% (R1) understand routine and non-routine problems in familiar and unfamiliar contexts and situations (R2) identify the situation or problems and identify the mathematical methods needed to solve them (R3) choose from a range of mathematics to find solutions	(N1) understand and use positive and negative numbers of any size in practical contexts (N2) carry out calculations with numbers of any size in practical contexts, to a given number of decimal places (N3) understand, use and calculate ratio and proportion, including problems involving scale (N4) understand and use equivalences between fractions, decimals and percentages (A1) understand and use simple formulae and equations involving one or two operations
Analysing Assessment weighting: 30-40% (A1) apply a range of mathematics to find solutions (A2) use appropriate checking procedures and evaluate their effectiveness at each stage	(G1) recognise and use 2D representations of 3D objects (G2) find area, perimeter and volume of common shapes (G3) use, convert and calculate using metric and, where appropriate, imperial measures (S1) collect and represent discrete and continuous data, using information and communication technology (ICT) where appropriate
Interpreting Assessment weighting: 30-40% (I1) interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations (I2) draw conclusions and provide mathematical justifications	(S2) use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using information and communication technology (ICT) where appropriate. (S3) use statistical methods to investigate situations (S4) use probability to assess the likelihood of an outcome

4 Assessment

4.1 Initial assessment of candidates

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

We have a free online Functional Skills Level Checker, in the resources section, on Interchange.

You will need to login and then you can access maths and English online level checking. You can also download paper-based level checking for maths, English and ICT.

These assessments can help you identify the profile of skills that a candidate has, to help pinpoint the most appropriate level as a starting point, before further diagnostic screening.

4.2 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.

At level 1, the specification will subsume the Entry level skill standards and coverage and range. At level 2, the specification will subsume the level 1 skill standards and coverage and range.

Assessment focuses on the three interrelated process skills identified in the skills standards:

- Representing

- Analysing

- Interpreting

All assessments take place under examination conditions, as specified in our *Instructions for conducting OCR Functional Skills and Cambridge Progression qualifications.* The assessment duration is 1 hour 30 minutes.

4.2.1 Paper-based tests

Assessments are available as a question paper (a paper-based test). Centres may enter candidates for paper-based tests at any time. Papers will be despatched to centres per daily cohort of entries and must be taken within 5 days of opening the assessment package.

The paper-based externally assessed components are distributed by secure post to the centre for each daily cohort of candidate entries, and should be stored within centres as per our *Instructions for Conducting OCR Functional Skills and Cambridge Progression Qualification Examinations,* which is available on our website.

4.2.2 On screen tests

Assessments are available as on-screen tests on demand.

The on-screen externally assessed components are made available to approved centres registered in the test delivery system. Once available, centres can schedule tests to take place at any time.

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

4.3 Assessment structure and content

There are three tasks which candidates need to complete. Subjects for the context within each task are, as far as possible, generic and realistic in nature. Contexts are enhanced as appropriate by OCR to match the reading level of the candidate. Contexts will be different for each level of assessment within the assessment session.

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

4.4 Resources for assessment

The use of a calculator and ruler is permitted.

4.5 Re-sits

There are no limits on the number of times a candidate may re-sit individual assessment components.

4.6 Suitable to the needs of the candidate

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

For candidates who have access requirements see *Arrangements for learners with access-related needs* in Section 8.7.

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

4.7   Centre malpractice guidance

It is the responsibility of the Head of Centre[1] to report (in writing) all cases of suspected malpractice involving centre staff or candidates. 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 is contained in the publication: *OCR Malpractice Procedures - A Guide for Centres* and the JCQ publication: *General and Vocational Qualifications – Suspected Malpractice in Examinations and Assessments* which is available from www.jcq.org.uk.

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[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:

- This centre handbook.

- Interactive exemplar material.

- Sample assessment materials.

- Past papers.

- Curriculum guide.

- Teacher resource activity bank.

- Level 1 Functional Skills mathematics underpinning skills support material for learners.

- Level 2 Functional Skills mathematics underpinning skills support material for learners.

5.2 Professional Development Programme

We are constantly looking for ways in which we can improve the support we offer to tutors and to make our professional development programme more accessible and convenient to all.

To find out more about our Professional Development Programme, please visit our CPD hub at https://www.cpdhub.ocr.org.uk/.

5.3 Documents referred to in this handbook

Our publications

Admin guide: Functional Skills

Making entries for Functional Skills via Interchange

Making online claims for Functional Skills qualifications

e-testing information and guide

Instructions for Conducting OCR Functional Skills and Cambridge Progression qualifications

JCQ publications at *http://www.jcq.org.uk*.

Access Arrangements, Reasonable Adjustments and Special Consideration

Suspected Malpractice in Examinations and Assessments

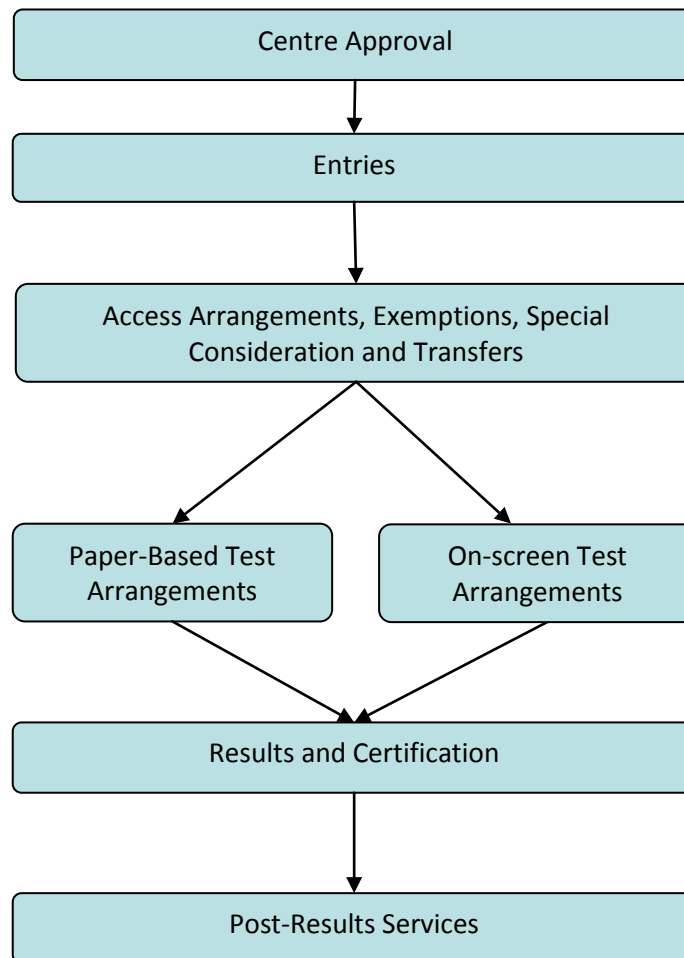Ofqual regulatory documents at http://ofqual.gov.uk/how-we-regulate/regulatory-documents/.

6 Administration

6.1 Overview of full process

This flow chart provides a brief summary of the administration process for these qualifications. For detailed information refer to our *Admin guide: Functional Skills*

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                    │    Centre Approval      │
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                    │        Entries          │
                    └─────────────────────────┘
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          ┌───────────────────────────────────────────┐
          │  Access Arrangements, Exemptions, Special │
          │     Consideration and Transfers           │
          └───────────────────────────────────────────┘
                     │                    │
                     ▼                    ▼
       ┌──────────────────┐    ┌──────────────────┐
       │  Paper-Based Test│    │  On-screen Test  │
       │   Arrangements   │    │   Arrangements   │
       └──────────────────┘    └──────────────────┘
                     │                    │
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          ┌───────────────────────────────────────────┐
          │         Results and Certification         │
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          ┌───────────────────────────────────────────┐
          │           Post-Results Services           │
          └───────────────────────────────────────────┘
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6.2 How to apply for centre approval

Your centre can either complete and submit the electronic Centre Approval Form available on our website or download the form and return the paper version to OCR Operations.

If you have any queries about centre approval contact our Customer Contact Centre on 024 7685 1509.

6.3 Making entries

For Functional Skills qualifications, you make unit entries only.

Centres must have been approved to offer these qualifications in order to make entries. We recommend your centre applies to become an approved centre well in advance of making your first entries.

There are two main routes for making entries:

• **Named entry** – This is where you provide specific candidate information (e.g. name and date of birth) for each qualification. In general this is our preferred entry route.

• **Unnamed entry** – This allows you to order a number of units in bulk without specifying who will be taking them. Although this increases the flexibility of the administration, it may increase the administrative burden later in the process.

Entries must be made via Interchange - our secure extranet facility. For full details of the process you should read this document in conjunction with the *Admin Guide: Functional Skills* and the Interchange step- by-step guide for Making entries for functional skills qualifications via Interchange.

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

Ofqual require Awarding Bodies to capture the Unique Learner Number (ULN) for all candidates who have claimed certification for any of these qualifications. It is also a condition of funding that all candidates that claim certification for publically funded qualifications must have a valid ULN.

The Personal Learning Record (PLR) is a permanent, online record of a candidate's qualifications and achievements and supports Credit Accumulation and Transfer (CAT). Each unit and qualification in the Qualifications and Credit Framework (QCF) has a credit value. The PLR enables learners to accumulate a record of their achievements within one place and supports the transfer of credit for these units between learning providers and awarding bodies, therefore supporting learners to gain full qualifications.

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 at whatever their level of learning.

Where a candidate has a ULN, you must enter their ten digit number in the ULN field when making entries via Interchange. For candidates 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 *Admin guide: Functional Skills* and at the Learner Records Service.

6.5 How to make certificate claims

All claims should be carried out via Interchange. For full details of the process see our step-by-step guide Making online claims for functional skills qualifications via Interchange.

7 Certification

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

OCR Functional Skills qualification in mathematics at level 1

OR

OCR Functional Skills qualification in mathematics at level 2

7.1 Claiming certificates

Certificates will be issued directly to your centre for successful candidates. In order to ensure that these are automatically issued, you must ensure that the OCR candidate number is **always** used where a candidate has already achieved one or more units. See the *Admin Guide: Functional Skills* for full details.

For details on how to make online claims see the step-by-step guide; Making online claims for functional skills qualifications .

7.2 Replacement certificates

For details on replacement certificates see the *Admin guide: Functional Skills*

8   Other information

8.1   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 nine strands of the Equality Act with the aim of ensuring both direct and indirect discrimination is avoided.

8.2   Regulatory requirements

These qualifications comply with Ofqual's *General Conditions of Recognition, Criteria for Functional Skills Qualifications and Functional Skills subject criteria*.

8.3   Language

These qualifications and any associated assessment materials are in English only. Only answers provided in English will be assessed.

8.4   Mode of delivery

You are free to deliver these qualifications using any mode of delivery that meets the needs of your candidates. Whatever mode of delivery is used, you must ensure that candidates have appropriate access to the resources identified in this handbook and units.

You should consider the candidate's complete learning experience when designing learning programmes. This is particularly important where candidates 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 accredited qualifications and our *last entry/certification notification*.

8.5   Centre resources and requirements

Your centre must provide appropriate assessment facilities for candidates that comply with our regulations stated in the *Admin guide: Functional Skills* and our *Instructions for Conducting OCR Functional Skills and Cambridge Progression Qualification Examinations* which is available to download from our [website](#).

Basic mathematical equipment should be available for both teaching and assessment, i.e. a calculator and a ruler. Sample assessment material for the OCR Functional Skills qualification in mathematics at level 1 and 2 is available to download from our website www.ocr.org.uk. Centres can use these sample assessments as practice papers to prepare candidates for the final assessment. These sample assessment materials include the assessment task, resource booklet and mark scheme.

8.6   Delivery in Wales and Northern Ireland

This qualification has only been approved by Ofqual for delivery in England.

Centres in Wales or Northern Ireland should contact the regulators for Wales or Northern Ireland (CCEA) for information regarding delivery of Functional Skills qualification.

8.7   Arrangements for learners with access-related needs

In line with the guidance provided by Ofqual for Functional Skills, candidates 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 candidate an assessment advantage over other candidates undertaking the same or similar assessments.

Centres must apply to OCR Special Requirements team for access arrangements using a JCQ Form 8. (It is presently not possible to submit applications for access arrangements for Functional Skills using *Access Arrangements Online.*)

For modified papers the centre must apply to OCR using a JCQ Form 7 in accordance with the deadlines published in the JCQ publication *Access Arrangements, Reasonable Adjustments and Special Consideration.*

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

Access arrangements	Yes/No
Readers	Yes
Scribes	Yes
Practical assistants	Yes
Word processors	Yes
Transcripts	Yes
BSL interpreters	Yes
Oral language modifiers	Yes
Modified question papers (including Braille)	Yes
Extra time	Yes
Models, visual/tactile aids, speaking scales	Yes

8.8   Wider issues

There are no requirements to address wider issues through Functional Skills qualifications. Tutors may have opportunities to address wider issues (e.g. spiritual, moral, ethical, social and cultural) through your choice of teaching or source materials.

9   Contacting us

9.1   Enquiries

For enquiries about any of our vocational qualifications, please contact the Customer Contact Centre on:

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

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

9.2   Customer feedback

We welcome feedback from customers on all aspects of our provision. Comments relating to this documentation should be sent to:

Functional Skills mathematics
Qualification Manager
Progress House
Westwood Way
Coventry
CV4 8JQ

9.3   Complaints

All complaints will be handled sensitively and speedily and used to inform how we can improve our service to customers.

If you are not satisfied with a product or service we have provided please follow the process set out in our complaints policy.

You can contact us:

by post –write to:
OCR Director of Standards
1 Hills Road
Cambridge
CB1 2EU

by email – send your email to complaints@ocr.org.uk

by phone/fax contact our Customer Contact Centre on:
Telephone: 024 76 851509
Fax: 024 76 421944