QUALIFICATION SPECIFICATION

Functional Skills Qualifications in mathematics

NOCN Functional Skills Qualification in mathematics at Level 1
Qualification No: 603/5269/3

NOCN Functional Skills Qualification in mathematics at Level 2
Qualification No: 603/5267/X

Operational Start Date

21st October 2019

Version

1.1 – December 2019

To know more about NOCN:

- Visit the NOCN website: **www.nocn.uk.org**
- Call the Customer Service Team: **0300 999 1177**

Introduction

NOCN is a leading awarding organisation that has been creating opportunities for learners for over 30 years. It is the organisation preserving the proud heritage of the Open College Network (OCN) in the UK and is a brand trusted by learners, colleges, training providers and employers who recognise NOCN qualifications as an indicator of competence and quality. A NOCN qualification recognises a learner's skills and knowledge and can support progression to employment, training and/or further education.

In addition to being an awarding organisation NOCN is also an apprenticeship assessment organisation and works internationally as well as in the UK.

This document is a resource for NOCN centres who wish to offer the NOCN Functional skills Qualifications in mathematics at Levels 1 and 2.

Contents

1. About Functional Skills Qualifications

Introduction to Functional Skills

Functional Skills Qualifications aim to provide learners with the essential knowledge, skills and understanding they need to operate confidently, effectively and independently in everyday life and in the workplace. They also support learners in their progression into employment and further study.

Functional Skills Qualifications are currently available in English, mathematics and ICT at five levels (Levels 1 and 2 and Entry levels 1, 2 and 3).

NOCN Functional Skills Qualifications are learning tools that enable learners to develop and Centres to assess Functional Skills as determined by the DfE's specified subject content. Functional Skills enables the application of underpinning skills and problem solving to everyday situations and provide young people and adults with the knowledge and skills that can be utilised in further learning, life and work.

FSQs at Levels 1 and 2 are important qualifications, particularly in the case of English and mathematics. This is because in some contexts they form part of school and college accountability measures.

FSQs at all levels have an important role, as they are taken by school-age learners and adults, including as part of ESOL provision and apprenticeships. They play an important role for those in prison and for learners with learning difficulties or disabilities. Many learners take FSQs, with their overall annual entry size being second only to GCSEs.

Development of Functional Skills

Functional Skills Qualifications (FSQs) were introduced in 2006, through a reform that contributed to addressing the skills shortages identified in the 2006 Leitch Review of Skills: *Prosperity for all in the global economy – world class skills*. The Government response to this is included in *World Class Skills: Implementing the Leitch Review of Skills in England*. FSQs

provided learners with an alternative qualification in three key subject areas to GCSEs. FSQs were designed to recognise literacy, numeracy and ICT skills through assessments set in different contexts.

Reformed Functional Skills Qualifications in English and mathematics

The Department for Education took the decision to reform FSQs in English and mathematics across all five levels. The reformed FSQs in English and mathematics will be introduced for first teaching from September 2019.

The purposes of reformed FSQs are to provide:

- reliable evidence of learners' achievements against demanding, but appropriate, content that is relevant to the workplace;
- assessment of learners' underpinning skills as well as their ability to apply this in different contexts; and
- a foundation for progression into further study or employment.

The government expectations for the newly reformed FSQs are:

- the size of FSQs should not change significantly;
- they should retain a pass/fail grading system; and
- employers and learners should have confidence in relation to the comparability between these qualifications, irrespective of the awarding organisation and the year in which they were taken.
- retain the flexibility but recognise that there is a balance to be struck between retaining flexibility and introducing controls necessary to maintain qualification standards over time and between awarding organisations.

Functional Skills suite of qualifications

Functional Skills Qualifications in mathematics are to provide learners with the essential knowledge, skills and understanding that will enable them to operate confidently, effectively and independently in everyday life and into the workplace. They support learners and help with progression into employment and further study.

NOCN Functional Skills Qualifications (FSQs)aim to maintain the flexibility and workplace relevance of the legacy qualifications, whilst providing tools that enable learners to develop and Centres to assess Functional Skills as determined by a set of skills standards. NOCN Functional Skills Qualifications aim to ensure that learners have demonstrated the knowledge and skills that employers need through the attainment of the learning aims and outcomes set out at each level.

NOCN Functional Skills Qualifications are available for all learners to access, enhancing and developing confidence and independence for life and work. Functional Skills Qualifications provide assessment of the required skills and essential knowledge to enable individuals to operate effectively and independently.

Functional Skills Qualifications are offered from Entry Level 1, 2 and 3 and Level 1 and Level 2, and are cited on the Register of Regulated Qualifications, and meet the Functional Skills Subject Content approved by DfE. These skills at Entry level should be used autonomously, applying them to a range of contexts. At Levels 1 and 2 the developing knowledge and skills should be communicated with confidence, effectiveness and with increasing independence.

NOCN Functional Skills Qualifications are assessment tools that enable learners to apply Functional Skills aims and outcomes set out at each level. Functional Skills Qualifications enables the application of the scope of study for each subject content as set out by the DfE.

The DfE state the purpose for Functional Skills Qualifications for mathematics as:

Purpose of Functional Skills mathematics for Entry Levels: to demonstrate a sound grasp of the underpinning skills and basics of mathematical skills appropriate to the level, and the ability to apply mathematical thinking to solve simple problems in familiar situations. Achievement of these qualifications can provide the skills for further study at Levels 1 and 2.

Purpose of Functional Skills mathematics for Level 1 and Level 2: 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.

Functional Skills Qualifications Subject Content

The Department for Educations Subject Content documents states the purpose, learning aims and outcomes, and subject content for Functional Skills mathematics at Entry Level, Level 1 and Level 2. NOCN suite of Functional Skills Qualifications Entry Level 1 to Level 2 in mathematics consist of the following: calculator and non-calculator sections.

NOCN Functional Skills mathematics Qualifications suite consists of assessments that are set by NOCN and cover the subject content set out by DfE. Functional Skills Qualifications aim to enable the leaner to gain confidence and fluency and a positive attitude towards mathematics. Learners will be able to convey their confidence in using mathematics, demonstrating and applying mathematics in different contexts. Learners will develop a sound grasp of mathematical knowledge and skills and apply it to solve mathematical problems in everyday life and in the workplace.

The specifications for mathematics set out in this specification aim to encourage teachers to emphasise the interconnectedness of the three different areas of mathematics, these are: number and the number system; common measures, shape and space; and information and data.

NOCN Functional Skills Qualifications aim to maintain the flexibility and workplace relevance of the legacy qualifications, whilst providing tools that enable learners to develop and Centres to assess Functional Skills as determined by a set of skills standards. NOCN Functional Skills Qualifications aim to ensure that learners have demonstrated the knowledge and skills that employers need through the attainment of the learning aims and outcomes set out at each level.

DfE Functional Skills Qualifications Subject Content can be found here:

functional-skills-subject-content-mathematics

Functional Skills Qualification Assessments

The assessments use and reinforce underpinning skills and problem-solving techniques. The assessments use and reinforce the subject content at the specified level and will reflect the learning aims and objectives.

NOCN sets and marks all assessments for Functional Skills Qualifications in mathematics at Levels 1 and 2.

The assessments are to be taken on the booked date and time and the assessments are sent to NOCN for marking. The NOCN service standard for issuing results to centres is 20 working days from receipt of the assessment.[1]

NOCN Functional Skills Qualifications in mathematics at Level 1 and Level 2 comprise of a single summative assessment which focuses on interrelated skills through assessing using numbers and the number system, measure shape and space and handing information and data. The assessment contains a number of questions which cover a representative sample of the subject content. The single summative assessments contains a non-calculator section, (Part A) which is 25% of the overall marks for the assessment and a calculator section, (Part B) which is 75% of the overall marks for the assessment. The single summative assessment with separate sections for the non- calculator and calculator tests are to be taken by learners in one sitting.

Assessment opportunities are offered throughout the year on demand so that learners may access the assessments when their tutors/assessors feel they are ready. Assessments are booked when registering the learners through Quartzweb.

Functional Skills assessments must be invigilated and learners are permitted the time durations specified below.

NOCN Functional Skills Qualification overall assessments timings are:

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[1] NOCN undertakes an awarding process to set pass marks for new assessments. This means that the service standard for new assessments is 30 working days.

- Level 1: 1 hour 45 minutes
  - non-calculator section: 30 minutes
  - calculator section: 1 hour 15 minutes

- Level 2: 2 hours and 15 minutes
  - non-calculator section: 30 minutes
  - calculator section: 1 hour 45 minutes

NOCN times are set to reflect the time requirement for learners at these levels to be able to satisfactorily complete and achieve the set outcomes and subject content as laid out by the DfE. The timings reflect the subject content requirement ensuring that the coverage and content are efficiently met and managed. The timings ensure that the assessment is fit for purpose, can be delivered efficiently, and allows each learner the opportunity to generate sufficient evidence which can be authenticated by the assessment.

The total number of marks available for the assessments is as follows:
- Level 1: 56 marks
  - non-calculator section: 14 marks
  - calculator section: 42 marks
- Level 2: 64 marks
  - non-calculator section: 16 marks
  - calculator section: 48 marks

The marks for each section are aggregated into a total mark for the assessment.

NOCN advise that all tasks/questions must be completed. Assessments are externally set and marked (by NOCN). Each assessment has detailed guidelines which outline how the assessments must be administered. Centres will not have access to the mark schemes.

The qualification is a single result of a pass or a fail only, the qualification is not graded. NOCN assessments at all levels contain two sections (calculator and non-calculator) that captures an overall mark.

The achievement of the qualification is gained through successful completion of a single summative question based assessment. The assessment contains two sections: Part A and Part B. Where a learner's performance is sufficient to meet the level requirements, a Functional Skills qualification pass certificate is awarded. Where a learners' performance does not meet the level of requirement to achieve a pass grade, a fail grade is issued, no certification will be awarded. A formal statement of results will be issued.

2. NOCN Functional Skills Qualifications in mathematics at Level 1 and Level 2

Functional Skills Qualifications (FSQ) in mathematics should enable learners to evidence their achievements against the subject content set by DfE. Leaners will demonstrate their application of underpinning skills and their ability to apply this in different contexts. Functional Skills mathematics aims to assist individuals in the progression and development in everyday life and work.

The Functional Skills Subject Content in mathematics aims to equip learners with the skills and confidence to fluently apply and adapt their mathematical knowledge and skills in a positive attitude to new situations in everyday life and work in a range of contexts and for various purposes.

Learning aims and outcomes at Levels 1 and 2

Functional Skills mathematics qualifications at these levels will:

- Allow students to 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 students 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; and
- Enable students to develop an appreciation of the role played by mathematics in the world of work and in life generally.

Individual assessment times

NOCN assessment time frames allow each specified level of attainment detailed in the specification to be reached by a learner who has attained the required level of knowledge, skills and understanding. They also facilitate accurate and consistent assessment and differentiation both within and across the levels.

NOCN assessment time for each individual component within the Functional Skills Qualifications equate timings and the balancing of both elements to capture the new proposed timings as outlined above for mathematics are:

Learners must complete the tasks set within the following timings:

- Level 1
    - non-calculator section 30 minutes
    - calculator section 1 hour 15 minutes
- Level 2
    - non-calculator section 30 minutes
    - calculator section 1 hour 45 minutes

NOCN stipulate that all calculator sections should be carried out with a **non-scientific calculator**.

Learners must use a non-scientific calculator for the calculator section. If a learner provides a calculator that is scientific and/or displays functions such as fraction facility, the calculator must be confiscated and returned at the end of the assessment. The tutor/centre should provide the learner with a non-scientific calculator that complies with the above statement and the specifications below.

Calculator specifications:
- Non-scientific calculators must:
    - be of a size suitable for use on the desk;
    - either battery or solar powered;
    - free of lids, cases and covers which have printed instructions or information

- Non-scientific calculators must not be designed or adapted to offer any of the following facilities:
  - language translators;
  - symbolic algebra manipulation;
  - symbolic differentiation or integration;
  - communication with other machines or the internet
  - have retrievable information stored in them - this includes:
    - databanks;
    - dictionaries;
    - mathematical formulas;
    - text

If a scientific calculator or a calculator with display functions such as fraction facility is found to be utilised with the assessment, then the assessment will be subject to a malpractice/maladministration process by the Awarding Organisation.

Guided Learning Hours

The total recommended guided learning hours for these qualifications is 55 hours.

Guided Learning Hours (GLH) are a guide to the amount of teacher-supervised or directed study time a learner will need to complete the learning needed for a qualification. NOCN recognises that every learner is different and the actual time taken may vary beyond the maximum and minimum shown.

The learning hours can be divided in any way, for example, a 20 GLH programme could be delivered in 2 hours a week for 10 weeks or 8 hours a day for 3 days, depending on the course and learners.

Total Qualification Time (TQT)

The Total Qualification Time for these qualifications is 55 hours.

Through consultation with users, TQT has been agreed by considering the total number of learning hours required for the average learner to achieve this qualification.

TQT is split into two areas:

- Guided Learning Hours (GLH):
    - learning activity under the immediate guidance or supervision of a lecturer, supervisor, tutor or other appropriate provider of education or training
    - includes the activity of being assessed if the assessment takes place under the immediate guidance or supervision of a lecturer, supervisor, tutor or other appropriate provider of education or training.
- Other Learning Hours (OLH):
    - an estimate of the number of hours a learner will spend, as directed by (but not under the immediate guidance or supervision of) a lecturer, supervisor, tutor or other appropriate provider of education or training, including:
        - preparatory work
        - self-study
        - or any other form of education or training, including assessment.

Examples of GLH activities include:

- Classroom-based learning supervised by a teacher
- Work-based learning supervised by a teacher
- Live webinar or telephone tutorial with a teach in real time
- E-learning supervised by a teacher in real time
- All forms of assessment which take place under the immediate guidance or supervision of an appropriate provider of training
- Exam time

Examples of OLH activities include:

- Independent and unsupervised research/learning
- Unsupervised compilation of a portfolio of work experience
- Unsupervised e-learning
- Unsupervised e-assessment
- Unsupervised coursework
- Watching a pre-recorded podcast or webinar

- Unsupervised work-based learning

Relationship with National Subject Content

The NOCN Functional Skills Qualifications in mathematics at Level 1 and Level 2 have been designed using the in accordance with the

- Decisions on Functional Skills Qualification reform - English and mathematics (March 2018 Ofqual/18/6361/2)
- Decisions on Functional Skills reform (Ofqual/18/6985/2)
- General Conditions of Recognition (Ofqual/18/6405)
- Functional Skills mathematics Guidance (Ofqual/18/6385/7)
- Functional Skills mathematics Conditions and Requirements (Ofqual/18/6385/6)
- Subject Content Functional Skills: mathematics (DFE-00046-2018).

They assess three different areas of mathematics set out in this content:

- Using numbers and the number system
- (Common) measures, shape and space
- Handling information and data

The Functional Skills Subject Content for mathematics Level 1 and Level 2 can be found in Appendix 1.

Language Requirements

The Functional Skills Qualifications are available in English.

Progression Opportunities

NOCN Functional Skills Qualifications in mathematics at Level 1 and Level 2 enable progression to further learning, employment, and learning and development opportunities within employment.

Functional Skills Qualifications are designed from Entry 1 to Level 2 to ensure clear progression pathways and personal development opportunities. The levels comply with the level descriptors for positioning units within the Regulations Qualifications Framework. This will ensure that learner achievement is clearly understood by both the learner and audiences outside of the education environment.

The NOCN Functional Skills Qualification in mathematics at Level 1 allows learners to progress to:

- GSCE mathematics;
- further study for vocational, vocational-related or general qualifications at Level 1 (for example, Level 1 NVQs or Level 1 Diplomas);
- further study at Level 2 (for example, Level 2 Functional Skills mathematics, NVQs or Level 2 Diplomas).

After successfully achieving the NOCN Functional Skills Qualification in mathematics at Level 2 learners may be able to progress to:

- GSCE mathematics;
- further study for vocational, vocational-related or general qualifications at Level 2 (for example, Level 2 NVQs or Level 2 Diplomas);
- further study at Level 3 (for example, Level 3 NVQs, Level 3 Diplomas or GCE A Levels).

The NOCN Functional Skills Qualifications in mathematics at Level 1 and Level 2 will support study in the full range of subjects and sectors.

3. Who are the qualifications for

There are no age restrictions for these qualifications.

Functional Skills are vital to the personal development of all learners.

These qualifications are suitable for a wide range of learners including:

- adults involved in learning programmes to prepare them for work
- adults in work to provide progression opportunities
- young people involved in GCSEs in schools
- those involved in Diplomas, Foundation Learning and Apprenticeships.

These newly reformed qualifications are assessed through a series of questions assessing their underpinning skills and problem solving skills.

Adults and young people will develop vital mathematical knowledge and problem-solving skills, ensuring that they are well equipped for success in employment, further learning and everyday life.

Employers will also benefit as Functional Skills Qualifications will help to ensure that employees are able to apply fundamental mathematical knowledge and problem-solving skills in work situations, improving effectiveness and productivity.

Functional Skills Assessments

Functional Skills assessments are designed:

- As summative assessments, they can be used when the learner is ready for assessment, that is, they have developed the appropriate skills through a teaching and learning programme.

- To cover as much of the Functional Skills Subject Content as reasonably practicable at either Level 1 or Level 2.
- To assess a reasonable amount of all three different areas of mathematics, namely: number and the number system; common measures, shape and space; and information and data.
- To assess confident and competent use of the content areas.

Restrictions on Learner Entry

There are no restrictions on learner entry to these qualifications. However, learners should have undertaken relevant initial assessments to ensure that they are following an appropriate learning programme leading to the summative assessment.

Recommended Prior Learning

There is no recommended prior knowledge, attainment or experience needed by learners wishing to enrol on these qualifications. However, learners should have undertaken relevant initial assessments to ensure that they are following an appropriate learning programme leading to the summative assessment.

Learners with Particular Requirements

If you have learners with particular requirements you should refer to the [NOCN Reasonable Adjustment & Special Considerations Policy & Procedure.](#)

The Permissions Table in the NOCN Reasonable Adjustment & Special Considerations Policy & Procedure lists the most commonly requested adjustments to standard assessment arrangements. The adjustments applicable to the Functional Skills qualifications in mathematics at Levels 1 and 2 are those listed in the 'Externally set and externally assessed' column. It is not intended to be a comprehensive list.

The NOCN Centre Recognition process requires policy statements on Equal Opportunities and Diversity and Disability Discrimination. These policy statements are then checked and confirmed through the Quality Review and Risk Assessment processes.

4. Achieving the qualifications

Learners will undergo appropriate teaching and learning programmes as would normally be delivered by centres. Curriculum teaching and learning must cover the Functional Skills Subject Content for mathematics in their entirety at Level 1 or Level 2. Learners can take the summative assessment for the qualifications when they have developed the appropriate skills and are ready for assessment.

The summative assessment consists of externally set assessment questions that assess as much of the subject content as is reasonably practicable including 25% underpinning skills and 75% problem solving. Sample assessments and detailed mark schemes, which are mapped to the Functional Skills Subject Content and Ofqual's Conditions and Requirements for mathematics and are available on the NOCN website under Functional Skills.

The assessment tasks must be taken under supervised conditions.

Assessment Conditions and Procedures

It is intended that learners will take assessments for the qualifications 'on demand' paper based, when they are ready.

Centres will specify the required dates and times for the assessments when they register the learners for the qualifications and must be received by NOCN no less than 5 working days prior to the assessment date.

Learners must take the assessments on the booked date and time of assessment. In exceptional circumstances, centres may apply to NOCN for learners to take assessments up to two hours before and two hours after the booked time. The booked assessment time cannot be changed without NOCN approval. NOCN may send an External Quality Assurer to check that the assessments are taking place in accordance with the guidance. The completed externally set assessments will then be sent to NOCN within 48 hours of completion for external marking.

Embedding Functional Skills Assessments

The qualifications can be delivered on a standalone basis or embedded into vocational/other qualifications.

The Functional Skills Level 1 and Level 2 mathematics assessment is delivered as a qualification at a stage when the learner has developed the appropriate skills following a relevant teaching and learning programme. The assessment could therefore be used alongside other provision. For example, learners working towards the NOCN Qualifications in Skills for Employment, Training and Personal Development could undertake the Functional Skills Level 1 or Level 2 mathematics assessment at any point appropriate for the learner in order to provide evidence of achievement in mathematics skills.

Embedded teaching and learning combines the development of literacy, language and numeracy with vocational, ICT or other skills. Using this approach, learners have the opportunity to achieve a Functional Skills Level 1 or Level 2 mathematics qualification as well as the vocational/other qualification.

5. How the qualifications will be assessed

The qualifications are awarded to learners who successfully achieve a pass in the summative assessment as per the qualification specification.

Assessment

Achievement of the qualifications is through successful completion of a single summative question based assessment which is:

- externally set by NOCN
- externally marked by NOCN.

NOCN will retain completed assessments for NOCN standardisation and question analysis activity.

Assessment Design

Assessments items/questions/tasks will be reviewed at least annually, more often if used extensively.

<u>Level 1</u>

Learners at Level 1 are expected to be able to use the knowledge and skills listed in the subject content 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.

The mark scheme specifies the performance evidence that is necessary to achieve the full range of marks. The assessment papers indicate how many marks are available for each task.

No pre-release material is used. Learners must complete the assessment in one hour and forty-five minutes. Calculators are allowed for Part B only.

The language used on the assessment paper is clear and straightforward. All assessments will include number, geometry and statistics.

Level 2

Learners at Level 2 are expected to be able to use the knowledge and skills listed in the subject content 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.

The mark scheme specifies the performance evidence that is necessary to achieve the full range of marks. The assessment papers indicate how many marks are available for each task.

No pre-release material is used. Learners must complete the assessment in one and a half hours. Calculators are allowed for Part B only.

Marking

The assessments are marked by NOCN. Learners will complete the assessments on a planned assessment date at a specific booked time. Assessments will then be submitted within 48 hours of completion to NOCN.

Summative/Externally Set Assessment

Assessments are externally set and marked (by NOCN) for both levels of the qualification.

Assessment Summary

To achieve the qualification, the learner must achieve a pass in the single summative assessment taken. If the qualification is not achieved a fail notification will be provided for the single summative assessment.

Certification

No exemption is allowed for Functional Skills mathematics; learners must achieve a pass in the single summative assessment of Functional Skills mathematics at Level 1 or Level 2 to be awarded the qualification. If a pass has not been achieved, a fail notification statement will be provided, no certification will be processed.

6. Offering the qualifications

Recognised Centres

If you are already recognised to offer NOCN qualifications and would like more information about offering this qualification, please contact: business-enquiries@nocn.org.uk.

Use Horizon to add this qualification to your centre.

New Centres

If you are interested in offering NOCN qualifications but not currently working with NOCN, you will need to be recognised as an NOCN approved centre. This process includes:

- Confirmation that your organisation has an adequate infrastructure in place to support the effective delivery of NOCN qualifications
- An agreement signed by the principal authority in the organisation confirming adherence to the specified terms and conditions. This safeguards the quality assurance standards, in relation to the delivery and assessment process.

If you would like more information about becoming an NOCN centre and offering these qualifications please see 'New centres' under the 'Centres' section on our website www.nocn.org.uk or contact business-enquiries@nocn.org.uk

Full details of all NOCN requirements are provided in Recognised Centre Handbook on the NOCN website at www.nocn.org.uk. Additional information may be found in the Centre Guidance for Functional Skills document which is available from NOCN.

7. How are the qualifications quality assured?

7.1 General Information

All providers wishing to deliver these qualifications will need to demonstrate the ability to manage and deliver the assessments, including adherence to NOCN quality assurance and assessment regulations.

NOCN will provide guidance and give support in enabling you to deliver the qualification.

All assessments are set and marked by NOCN.

7.2 Invigilation

Centres must comply with NOCN's Invigilation Policy and follow the Guidance for Invigilators**. In addition, there are specific requirements for Functional Skills qualifications which have been agreed by all awarding organisations which offer the qualifications:**

The head of centre must ensure that:

Administration of exams

('Administration' includes initial receipt of confidential materials, secure storage, movement and preparation of materials for scheduled assessments, and registration, secure storage and return of materials to the awarding organisation after scheduled assessments are completed)

    a. *No tutor of a Functional Skills qualification can be involved in the administration of the assessment materials for level 1 and 2 assessments in that subject, regardless of the level they teach.*

Invigilation of exams

    b. *A Functional Skills subject tutor must not be involved in the invigilation of that subject, even if they have not taught those learners (i.e. a Functional Skills English tutor must not invigilate any Functional Skills English assessments and a Functional Skills Maths tutor must not invigilate any Functional Skills Maths assessments, regardless of the level they teach).*

Exceptions

A centre must ensure that it has a suitable invigilator available for all level 1 and 2 Functional Skills assessments.

There are no automatic exceptions to this rule. In exceptional circumstances, where only a tutor can access the assessment location and/or the learners, some adjustment may be granted by prior arrangement with, and at the discretion of, the awarding organisation.

*Any exception on these grounds **must** be agreed by the awarding organisation in advance of the assessment date.*

An exception may also require the centre to agree to additional measures to ensure the security of materials and additional monitoring by the awarding organisation.

Please contact NOCN if you have any queries relating to the information above.

7.3 Standardisation

Standardisation is a process that promotes consistency in the understanding and application of standards, as it:

- establishes statements on the standard of evidence required to meet the assessment subject content for the NOCN qualifications
- makes recommendations on assessment practice and produces advice and guidance for the assessment of units
- identifies good practice in assessment.

APPENDIX 1

DfE FUNCTIONAL SKILLS SUBJECT CONTENT:

MATHEMATICS LEVEL 1 AND LEVEL 2

Subject Content: Level 1

Use of number and the number system: students 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 below.

Level 1 - using numbers and the number system – *whole numbers, fractions, decimals and percentages*
1. Read, write, order and compare large numbers (up to one million)
2. Recognise and use positive and negative numbers
3. Multiply and divide whole numbers and decimals by 10, 100, 1000
4. Use multiplication facts and make connections with division facts
5. Use simple formulae expressed in words for one or two-step operations
6. Calculate the squares of one-digit and two-digit numbers
7. Follow the order of precedence of operators
8. Read, write, order and compare common fractions and mixed numbers
9. Find fractions of whole number quantities or measurements
10. Read, write, order and compare decimals up to three decimal places
11. Add, subtract, multiply and divide decimals up to two decimal places
12. Approximate by rounding to a whole number or to one or two decimal places
13. Read, write, order and compare percentages in whole numbers
14. Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof
15. Estimate answers to calculations using fractions and decimals
16. Recognise and calculate equivalences between common fractions, percentages and decimals
17. Work with simple ratio and direct proportions

Use of common measures, shape and space: students 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 below.

Level 1 - using common measures, shape and space
18. Calculate simple interest in multiples of 5% on amounts of money
19. Calculate discounts in multiples of 5% on amounts of money
20. Convert between units of length, weight, capacity, money and time, in the same system
21. Recognise and make use of simple scales on maps and drawings
22. Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles
23. Calculate the volumes of cubes and cuboids
24. Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles
25. Interpret plans, elevations and nets of simple 3-D shapes
26. Use angles when describing position and direction, and measure angles in degrees

Handle information and data: students 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 below.

Level 1 - handling information and data
27. Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs
28. Group discrete data and represent grouped data graphically
29. Find the mean and range of a set of quantities
30. Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events
31. Use equally likely outcomes to find the probabilities of simple events and express them as fractions

Solving mathematical problems and decision making: students at Level 1 are expected to be able to use the knowledge and skills listed above to recognise and obtain a solution or solutions to a straightforward problem. A straightforward problem is one that requires students 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 student will be able to address individual problems, some of which draw upon a combination of any two of the mathematical content areas and require students to make connections between those content areas.

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Level 1 - solving mathematical problems and decision making

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Students at Level 1 are expected to be able to:

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- Read, understand and use mathematical information and mathematical terms used at this level;
- Address individual problems as described above;
- Use knowledge and understanding to a required level of accuracy;
- Analyse and interpret answers in the context of the original problem;
- Check the sense, and reasonableness, of answers; and
- 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 student to be able to independently identify and carry out an appropriate mathematical approach.

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Subject Content: Level 2

Use of numbers and the number system: students 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 below.

Level 2 - using numbers and the number system – *whole numbers, fractions, decimals and percentages*
1. Read, write, order and compare positive and negative numbers of any size
2. Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation
3. Evaluate expressions and make substitutions in given formulae in words and symbols
4. Identify and know the equivalence between fractions, decimals and percentages
5. Work out percentages of amounts and express one amount as a percentage of another
6. Calculate percentage change (any size increase and decrease), and original value after percentage change
7. Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers
8. Express one number as a fraction of another
9. Order, approximate and compare decimals
10. Add, subtract, multiply and divide decimals up to three decimal places
11. Understand and calculate using ratios, direct proportion and inverse proportion
12. Follow the order of precedence of operators, including indices

Use of measures, shape and space: students 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 below.

Level 2 - measures, shape and space
13. Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting
14. Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph
15. Calculate using compound measures including speed, density and rates of pay
16. Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)
17. 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)
18. Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements
19. Use coordinates in 2-D, positive and negative, to specify the positions of points
20. Understand and use common 2-D representations of 3-D objects
21. Draw 3-D shapes to include plans and elevations
22. Calculate values of angles and/or coordinates with 2-D and 3-D shapes

Handle information and data: students 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 below.

Level 2 - handling information and data
23. Calculate the median and mode of a set of quantities
24. Estimate the mean of a grouped frequency distribution from discrete data
25. Use the mean, median, mode and range to compare two sets of data
26. Work out the probability of combined events including the use of diagrams and tables, including two-way tables
27. Express probabilities as fractions, decimals and percentages
28. Draw and interpret scatter diagrams and recognise positive and negative correlation

Solving mathematical problems and decision making: students at Level 2 are expected to be able to use the knowledge and skills listed above 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 student will be able to address individual problems some of which draw upon a combination of all three mathematical areas and require students to make connections between those content areas.

Level 2 - solving mathematical problems and decision making
Students at Level 2 are expected to be able to: • Read, understand, and use mathematical information and mathematical terms; • Address individual problems as described above; • Use knowledge and understanding to a required level of accuracy; • Identify suitable operations and calculations to generate results; • Analyse and interpret answers in the context of the original problem; • Check the sense and reasonableness of answers; and • 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 student to be able independently to identify and carry out an appropriate mathematical process or processes.

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