

**Skillsfirst Awards**

**Handbook**

**Functional Skills Mathematics Level 1 & 2**

**FSM01**

**FSM02**



**Skillsfirst**  
growth through learning

Skillsfirst Awards  
Suite 416  
Fort Dunlop  
Fort Parkway  
Birmingham  
B24 9FD

[www.skillsfirst.co.uk](http://www.skillsfirst.co.uk)

## Qualification Codes:

<b>Skillsfirst Qualification code</b>	<b>Qualification Title</b>	<b>Ofqual Code</b>
FSM01	Skillsfirst Functional Skills qualification in Mathematics Level 1	501/1499/2
FSM02	Skillsfirst Functional Skills qualification in Mathematics Level 2	501/1437/2

<b>Contents</b>	<b>Page</b>
<b>Section 1 – About Skillsfirst</b>	
1.1 Skillsfirst Centre Recognition and Qualification Approval	3
<b>Section 2 – Introduction to Functional Skills</b>	
2.1 What are Functional Skills	4
2.2 Who is this qualification for?	4
2.3 What does the Mathematics Functional Skill cover?	4
<b>Section 3 – Qualification Structure</b>	5
<b>Section 4 – Qualification Details</b>	6
4.1 Process Skills	6
4.2 Standards for Level 1 Mathematics with Assessment Weightings	7
4.3 Standards for Level 2 Mathematics with Assessment Weightings	8
<b>Section 5 – Delivering Functional Skills</b>	9
5.1 Teaching staff	9
5.2 Learners	9
5.3 Registering learners	9
5.4 Scheduling Functional Skills exams	9
5.5 Preparing learners for the Functional Skills Mathematics exam	9
5.6 Conduct of Functional Skills exams	10
5.7 Pass marks	10
5.8 Learner certification process	10
5.9 Re-sits	11
5.10 Access to Functional Skills Mathematics	11
5.11 Centre Malpractice Guidance	12
5.12 Appeals Procedure	12
<b>Section 6 – Further Support</b>	12

## 1.1 About Skillsfirst

**Skillsfirst Awards** offers work based learning qualifications and Apprenticeships in a number of different sectors.

Developed in partnership with Sector Skills Councils and employers, our qualifications are regularly updated to reflect regulatory and technical changes. We are committed to offering our customers excellent levels of service, value for money and a collaborative, forward-thinking approach to working.

Skillsfirst recognise the value of skills in the work environment, essential for both economic growth and creating wider social benefits. Through its programme of continuous improvement, Skillsfirst strives to meet the demand from employers for high performing, high quality products.

For further information please contact Skillsfirst Customer Services +44(0)121 270 5100 or visit [www.Skillsfirst.co.uk](http://www.Skillsfirst.co.uk).

## 1.2 Skillsfirst Centre Recognition and Qualification Approval

Centres wishing to offer Functional Skills must comply with both this qualification handbook and the Skillsfirst qualification approval criteria.

**If you are an existing Skillsfirst centre and want to add Functional Skills to your approved qualifications:**

- contact us at [customerservices@skillsfirst.co.uk](mailto:customerservices@skillsfirst.co.uk) and request a qualification application form.

**If you are not an existing Skillsfirst centre and wish to register your interest in becoming an accredited centre:**

- Call us on 0121 270 5100
- A member of our Business Development Team will be happy to guide you through the centre approval process

If you require any support, please contact the Skillsfirst customer services team who will be delighted to support you on 0121 270 5100 or [customerservices@skillsfirst.co.uk](mailto:customerservices@skillsfirst.co.uk)

## 2.0 Introduction to Functional Skills

### 2.1 What are Functional Skills?

Functional Skills have been developed as part of a government initiative to improve the levels of literacy, numeracy and ICT in the UK. The qualifications have been designed to assess skills that can be applied to a learner's life, learning and work.

Skillsfirst Awards currently offers Functional Skills at levels 1 and 2, with flexible, onscreen testing opportunities for all subjects.

### 2.2 Who is this qualification for?

Functional Skills underpin nearly all forms of 14+ learning in England and are intended for a vast range of different settings.

There are specific rules around the achievement of Functional Skills within Apprenticeship frameworks, as well as an expectation that Foundation Learning and other programmes (eg GCE/GCSE) should include opportunities to develop and achieve appropriate Functional Skills qualifications.

### 2.3 What does the Mathematics Functional Skill qualification cover?

Competence in Functional Skills Mathematics is broadly about being able to:

- Recognise a situation which has aspects that can be solved using mathematics
- Decide which methods and tools to use
- Select the mathematical information to use
- Use the appropriate mathematical procedures
- Examine patterns and relationships
- Find results and solutions
- Interpret the results and solutions
- Draw conclusions in the light of the situations
- Consider the appropriateness and the accuracy of the results and conclusions
- Choose an appropriate language and form of presentation to provide the results and solutions

### 3.0 Qualification Structures

These qualifications can be achieved by the learner completing a single mandatory unit.

#### Skillsfirst Functional Skills qualification in mathematics at level 1

Skillsfirst Unit Number	Unit Title	Guided Learning Hours
SKI3263	Mathematics – Level 1	45

#### Skillsfirst Functional Skills qualification in mathematics at level 2

Skillsfirst Unit Number	Unit Title	Guided Learning Hours
SKI3264	Mathematics – Level 2	45

## 4.1 Qualification Details

The Functional Skills qualification in Mathematics at Level 1 and Level 2 is assessed by one externally set, externally marked assessment (two hours).

Each assessment is based on a given theme with a purpose that is accessible to a broad range of learners.

## 4.2 Process Skills

The table below details the three Functional Skills Mathematics process skills - 'Represent', 'Analyse' and 'Interpret' - each of which is assessed.

<b>Represent</b> – selecting the mathematics and information to model a situation	<b>Analyse</b> – processing and using mathematics	<b>Interpret</b> – interpreting and communicating the results of the analysis
<ul style="list-style-type: none"><li>• Learners recognise that a situation has aspects that can be represented using mathematics</li><li>• Learners make an initial model of a situation using suitable forms of representation</li><li>• Learners decide on the methods, operations and tools, including ICT, to use in a situation</li><li>• Learners select the mathematical information to use</li></ul>	<ul style="list-style-type: none"><li>• Learners use appropriate mathematical procedures</li><li>• Learners examine patterns and relationships</li><li>• Learners change values and assumptions or adjust relationships to see the effects on answers in models</li><li>• Learners find results and solutions</li></ul>	<ul style="list-style-type: none"><li>• Learners interpret results and solutions</li><li>• Learners draw conclusions in light of situations</li><li>• Learners consider the appropriateness and accuracy of results and conclusions</li><li>• Learners choose appropriate language and forms of presentation to communicate results and solutions</li></ul>

Specifications are developed to ensure sufficient coverage of the criteria and consistency/reliability of assessments over time. The assessment consists of three practical tasks, each requiring the learner to tackle a problem or achieve a purposeful outcome.

### 4.3 Standards for Level 1 Mathematics with Assessment Weightings

Skill standards	Coverage and range (indicative)	Assessment weighting
<p><b>Represent</b></p> <p>Understand practical problems in familiar and unfamiliar contexts and situations, some of which are non-routine</p> <p>Identify and obtain necessary information to tackle the problem</p> <p>Select mathematics in an organised way to find solutions</p>	<p>Understand and use whole numbers and understand negative numbers in practical contexts</p> <p>Add, subtract, multiply and divide whole numbers using a range of strategies</p> <p>Understand and use equivalences between common fractions, decimals and percentages</p> <p>Add and subtract decimals up to two decimal places</p> <p>Solve simple problems involving ratio, where one number is a multiple of the other</p>	30-40%
<p><b>Analyse</b></p> <p>Apply mathematics in an organised way to find solutions to straightforward practical problems for different purposes</p> <p>Use appropriate checking procedures at each stage</p>	<p>Use simple formulae expressed in words for one- or two-step operations</p> <p>Solve problems requiring calculation, with common measures, including money, time, length, weight, capacity and temperature</p> <p>Convert units of measure in the same system</p> <p>Work out areas and perimeters in practical situations</p>	30-40%
<p><b>Interpret</b></p> <p>Interpret and communicate solutions to practical problems drawing simple conclusions and giving explanations</p>	<p>Construct geometric diagrams models and shapes</p> <p>Extract and interpret information from tables, diagrams, charts and graphs</p> <p>Collect and record discrete data and organize and represent information in different ways</p> <p>Find mean and range</p> <p>Use data to assess the likelihood of an outcome</p>	30-40%

**Notes:**

It is important to note the weightings in the right hand column as this reflects the marks provided in the assignments.

Assessment at level 1 mathematics will require learners to demonstrate their ability to represent, analyse and interpret, using number, geometry and statistics plus a selection of other skills in the 'coverage and range' within functional contexts.

## 4.4 Standards for Level 2 Mathematics with Assessment Weightings

Skill standards	Coverage and range (indicative)	Assessment weighting
<p><b>Represent</b></p> <p>Understand routine and non-routine problems in familiar and unfamiliar contexts and situations</p> <p>Identify the situation or problems and identify the mathematical methods needed to solve them</p> <p>Choose from a range of mathematics to find solutions</p>	<p>Understand and use positive and negative numbers of any size in practical contexts</p> <p>Carry out calculations with numbers of any size in practical contexts, to a given number of decimal places</p> <p>Understand, use and calculate ratio and proportion, including problems involving scale</p> <p>Understand and use equivalences between fractions, decimals and percentages</p>	30-40%
<p><b>Analyse</b></p> <p>Apply a range of mathematics to find solutions</p> <p>Use appropriate checking procedures and evaluate their effectiveness at each stage</p>	<p>Understand and use simple formulae and equations involving one – or two-step operations</p> <p>Recognize and use 2D representations of 3D objects</p> <p>Find area, perimeter and volume of common shapes</p> <p>Use, convert and calculate using metric and, where appropriate, imperial measures</p>	30-40%
<p><b>Interpret</b></p> <p>Interpret and communicate solutions to multi-stage practical problems in familiar and unfamiliar contexts and situations</p> <p>Draw conclusions and provide mathematical justifications</p>	<p>Collect and represent discrete and continuous data, using information and communication technology (ICT), where appropriate</p> <p>Use and interpret statistical measures, tables and diagrams for discrete and continuous data, using information and communication technology (ICT) where appropriate</p> <p>Use statistical methods to investigate situations</p> <p>Use probability to assess the likelihood of an outcome</p>	30-40%

### Note:

It is important to note the weightings in the right hand column as this reflects the marks provided in the assignments.

Assessment at level 2 mathematics will require learners to demonstrate their ability to represent, analyse and interpret, using number, geometry and statistics plus a selection of other skills in the 'coverage and range' within functional contexts.

## 5.1 Delivering Functional Skills

To effectively delivery Functional Skills, centres must ensure that the appropriate teaching, administrative and physical resources are in place.

## 5.2 Teaching Staff

Teaching staff must:

- Have 2 years experience in teaching/training

**Or**

- Are working towards an appropriate teaching/training qualification (Cert Ed or Learning & Development trainer units)

**Or**

- Hold an appropriate teaching/training qualification (Cert Ed or Learning & Development trainer units)
- Have knowledge and experience in the subject being taught to be able to judge the learner's performance against the Functional Skills Standards and to be able to justify their teaching practices
- As a minimum hold the same level of the qualification being taught – but preferably hold a higher level.

## 5.3 Learners

There are no formal entry requirements for this qualification. However, centres will need to make an initial assessment of each candidate prior to the start of their programme to ensure they are working towards relevant Functional Skills qualifications at the appropriate level.

## 5.4 Registering learners

In order to enter learners for any of the Functional Skills examinations, centre staff should first register learners with Skillsfirst through our secure online portal **REG** (Registration/Certification Electronic Gateway).

If you don't have a username and password for this portal, please contact Skillsfirst on 0121 270 5100 or email [customerservice@skillsfirst.co.uk](mailto:customerservice@skillsfirst.co.uk)

## 5.5 Scheduling Functional Skills exams

When taken onscreen, Functional Skills can be taken at any time (on-demand). For details on how to schedule and manage onscreen exams please refer to the [SecureAssess/Secure Client Key and Functional Skills User Guide](#)

Marking of papers takes place in frequent windows. For information on marking windows and result release dates refer to the [Functional Skills Exam Delivery Calendar](#), available on our website.

## 5.6 Preparing learners for the Functional Skills mathematics examination

A free onscreen practice test will be made available to centres. This can be used by staff and learners to familiarise themselves with the onscreen system functionality.

It is important to recognise that the style of the assessments for Functional Skills mathematics requires that candidates use problem solving techniques to arrive at their own solutions to particular problems. They must also show all workings out to gain the maximum possible marks. It is essential therefore, that candidates are properly prepared for this type of examination and that they make full use of the time available in the examination to complete their responses.

## 5.7 Conduct of Functional Skills exams

Functional Skills examinations must be taken under supervised conditions, that is:

- Learners must be continually supervised by a reliable person
- All necessary facilities must be available to learners
- Any time restrictions must be complied with
- Learners work must be independent and unaided

The document '[JCQ instructions for conducting Functional Skills examinations](#)' includes further information relating to:

- Invigilation
- Test Environment
- Guidance on conducting onscreen exams
- Safe custody of exam papers
- Dealing with malpractice and emergencies

## 5.8 Pass marks

The pass score for Functional Skills examinations is normally set at around 60% of available marks. The 60% of available marks may be achieved over the paper as a whole; therefore knowledge, understanding and process skills are sampled across the range of indicative content. There is no requirement to achieve 60% of available marks within a particular skill standard in order to achieve a pass overall.

## 5.9 Learner certification process

Functional Skills are 'pass' or 'fail' qualifications, they are not graded. They are also free standing qualifications so each subject will be certificated separately. Certificates are titled by skill and level achieved.

In the case of Functional Skills Mathematics, which is achieved through one externally set and marked assessment, Skillsfirst will automatically dispatch a learner's certificate when they have achieved the required pass mark in their examination.

Attainment table points for Functional Skills qualifications are as follows:

- **Level 1 = 12.5 points** (equivalent to Skills for Life (adult literacy and numeracy at Level 1; Key Skills at Level 1; GCSE at grades D – G and NVQ Level 1).
- **Level 2 = 23 points** (equivalent to Skills for Life (adult literacy and numeracy at Level 2; Key Skills at Level 2; GCSE at grades A\* - C and NVQ Level 2)

The points for Levels 1 and 2 are in addition to points allocated for other qualifications such as GCSEs.

## 5.10 Re-sits

There are no limits on the number of times a learner may re-sit a Functional Skills exam, however a learner must wait at least 14 days from the date of the last exam (or the date uploaded for onscreen exams).

Skillsfirst strongly recommend that a learner receives proper tuition and preparation before any re-sit.

Please note that there is a £10 charge for each re-sit.

## 5.11 Access to Functional Skills mathematics

In line with the guidance provided by the Ofqual inclusion sheets for Functional Skills, learners can have access to all forms of equipment, software and assistance 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.

The Functional Skills qualifications criteria require awarding organisations to develop assessment materials that anticipate the needs of candidates with disabilities and which minimise, as far as possible, the need to make reasonable adjustments or exemptions whilst still assessing the skills standards.

Candidates may be permitted access to any of the following when undertaking Functional Skills Mathematics assessments:

- Readers
- Scribes
- Practical Assistants
- Word Processors
- Transcripts
- BSL Interpreters
- Oral language modifiers
- Modified question papers (including Braille)
- Extra time
- Models, visual/tactile aids, speaking scales

### Exemptions – please note

Disability Discrimination legislation (now incorporated into the Equality Act 2010) permits the granting of exemptions for specific assessment components within qualifications in certain circumstances. In the case of Functional Skills Mathematics this is not possible since the whole qualification comprises only one assessment component.

For full details see the [Skillsfirst Reasonable Adjustment and Special Consideration Policy](#) available on the Skillsfirst website.

## 5.12 Centre Malpractice & Maladministration guidance

Malpractice and maladministration is outlined in the [Skillsfirst Malpractice & Maladministration policy](#) available on the Skillsfirst website

## 5.13 Appeals Procedure

The Appeals procedure is outlined in the [Skillsfirst Appeals Policy](#) available on the [Skillsfirst website](#).

## 6.1 Further Support

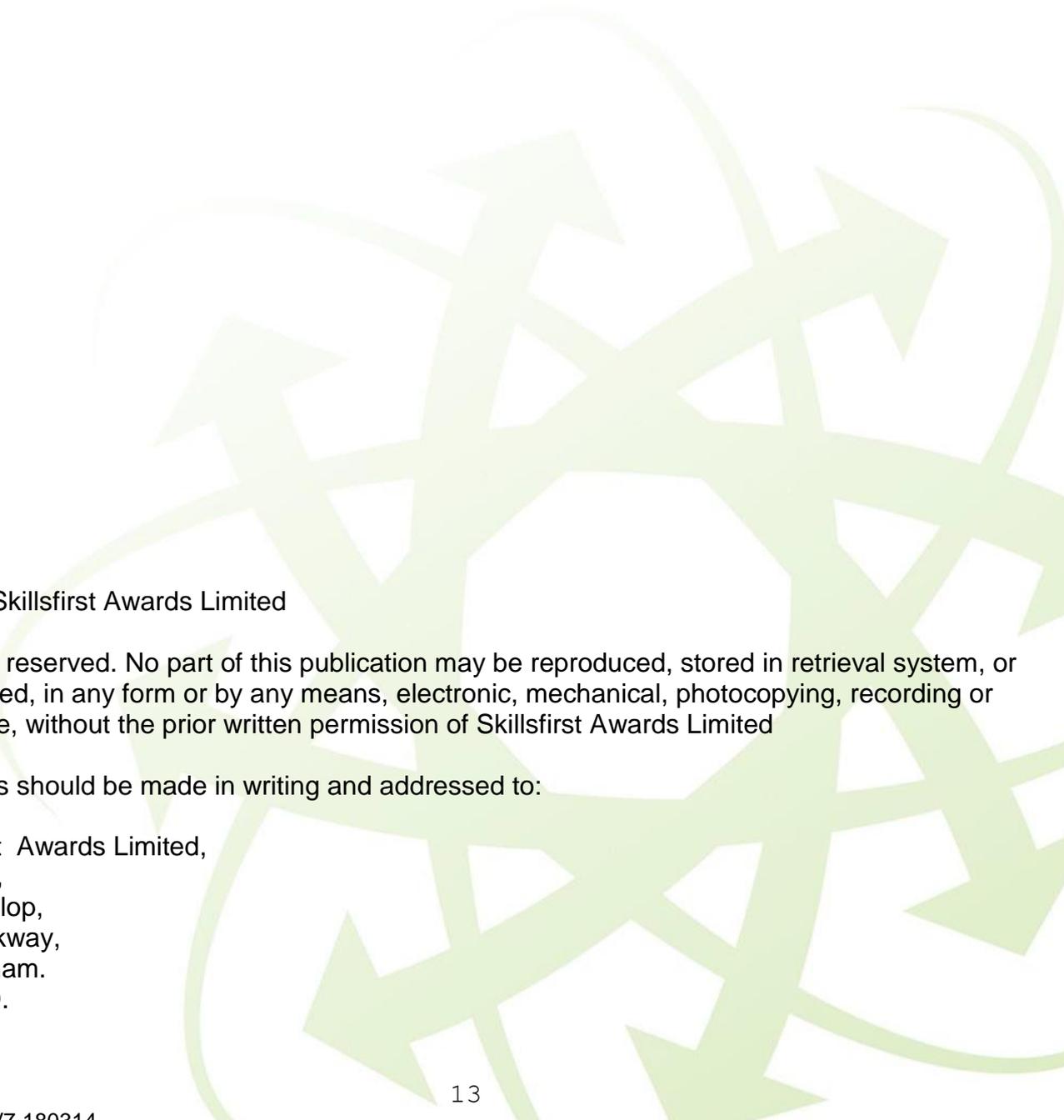
The following material is available for this qualification:

- Teacher and learner support materials, developed in partnership with Guroo. These include practice challenges, example answers, podcasts and videos. These can be accessed through the secure area of the Skillsfirst website.
- Functional Skills Mathematics practice papers.

Other information is available from:

The **Functional Skills Support Programme** is available free of charge to all schools and post-16 education and training centres. Post-16 support covers colleges, sixth-form colleges and independent training organisations, as well as the secure estate and adult and community settings. For more information about the programme and for contact information, visit [www.fssupport.org](http://www.fssupport.org).

Guroo Ltd produces learning materials around a series of real life problem solving tasks and challenges. Visit [www.guroo.co.uk](http://www.guroo.co.uk) for further details.



© 2012 Skillsfirst Awards Limited

All rights reserved. No part of this publication may be reproduced, stored in retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of Skillsfirst Awards Limited

Requests should be made in writing and addressed to:

Skillsfirst Awards Limited,  
Unit 416,  
Fort Dunlop,  
Fort Parkway,  
Birmingham.  
B24 9FD.