QUALIFICATION HANDBOOK

Awards/Certificates in Mathematics Skills

(3847-21/22/23)

January 2013 Version 1.0

City & Guilds

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Qualifications at a glance

Subject area	**Mathematics**
City & Guilds number	3847
Age group approved	16+
Entry requirements	N/A
Assessment	By portfolio
Fast track	Available
Support materials	Qualification Handbook Candidate Logbook Assessment Pack
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Awards - single units

Title and level	City & Guilds number	Accreditation number (from 1st Jan 2013)
Entry Level Award in Number - Whole Numbers to 10 (Entry 1)	3847-21	600/7526/0
Entry Level Award in Number - Addition (Entry 1)	3847-21	600/7308/1
Entry Level Award in Number - Subtraction (Entry 1)	3847-21	600/7309/3
Entry Level Award in Measure, Shape and Space - Money (Entry 1)	3847-21	600/7310/X
Entry Level Award in Measure, Shape and Space - Time (Entry 1)	3847-21	600/7311/1
Entry Level Award in Measure, Shape and Space - Size, Length, Width and Height (Entry 1)	3847-21	600/7517/X
Entry Level Award in Measure, Shape and Space - Weight and Capacity (Entry 1)	3847-21	600/7312/3
Entry Level Award in Measure, Shape and Space - Common Shapes and Positional Vocabulary (Entry 1)	3847-21	600/7313/5
Entry Level Award in Handling Data - Extract and Sort Data (Entry 1)	3847-21	600/7314/7
Entry Level Award in Handling Data - Represent Information (Entry 1)	3847-21	600/7315/9
Entry Level Award in Number - Whole Numbers to 100 (Entry 2)	3847-21	600/7527/2
Entry Level Award in Number - Addition (Entry 2)	3847-21	600/7316/0
Entry Level Award in Number - Subtraction (Entry 2)	3847-21	600/7317/2
Entry Level Award in Number - Fractions (Entry 2)	3847-21	600/7318/4
Entry Level Award in Number - Multiplication (Entry 2)	3847-21	600/7319/6
Entry Level Award in Measure, Shape and Space - Money (Entry 2)	3847-21	600/7528/4

Entry Level Award in Measure, Shape and Space - Time (Entry 2)	3847-21	600/7320/2
Entry Level Award in Measure, Shape and Space - Length (Entry 2)	3847-21	600/7530/2
Entry Level Award in Measure, Shape and Space - Weight, Capacity and Temperature (Entry 2)	3847-21	600/7321/4
Entry Level Award in Measure, Shape and Space - Shapes and Positional Vocabulary (Entry 2)	3847-21	600/7322/6
Entry Level Award in Handling Data - Extract and Sort Data (Entry 2)	3847-21	600/7323/8
Entry Level Award in Handling Data - Collect and Represent Information (Entry 2)	3847-21	600/7324/X
Entry Level Award in Number - Whole Numbers to 1000 (Entry 3)	3847-21	600/7325/1
Entry Level Award in Number - Addition and Subtraction (Entry 3)	3847-21	600/7326/3
Entry Level Award in Number - Fractions (Entry 3)	3847-21	600/7525/9
Entry Level Award in Number - Multiplication (Entry 3)	3847-21	600/7327/5
Entry Level Award in Number - Division (Entry 3)	3847-21	600/7328/7
Entry Level Award in Number - Decimals (Entry 3)	3847-21	600/7338/X
Entry Level Award in Measure, Shape and Space - Money (Entry 3)	3847-21	600/7329/9
Entry Level Award in Measure, Shape and Space - Temperature and Time (Entry 3)	3847-21	600/7330/5
Entry Level Award in Measure, Shape and Space - Length, Weight, Capacity and Shapes (Entry 3)	3847-21	600/7331/7
Entry Level Award in Handling Data - Extract and Use Data (Entry 3)	3847-21	600/7332/9
Entry Level Award in Handling Data - Represent Information (Entry 3)	3847-21	600/7518/1
Level 1 Award in Number - Positive and Negative Numbers	3847-21	600/7519/3
Level 1 Award in Number - Fractions, Ratio and Proportion	3847-21	600/7333/0
Level 1 Award in Number - Decimals	3847-21	600/7522/3
Level 1 Award in Number - Percentages	3847-21	60/7521/1
Level 1 Award in Measure, Shape and Space - Money, Time and Temperature	3847-21	600/7334/2
Level 1 Award in Measure, Shape and Space - Length, Weight and Capacity	3847-21	600/7367/6
Level 1 Award in Measure, Shape and Space - Calculate Using Shape and Space	3847-21	600/7335/4
Level 1 Award in Handling Data - Extract and Interpret Data	3847-21	600/7336/6
Level 1 Award in Handling Data - Collect, Organise and Represent Data	3847-21	600/7337/8
Level 1 Award in Handling Data - Mean and Range	3847-21	600/7345/7
Level 1 Award in Handling Data - Probability	3847-21	600/7339/1
Level 2 Award in Number - Number and Formulae	3847-21	600/7340/8

Level 2 Award in Number - Fractions, Ratio and Proportion	3847-21	600/7341/X
Level 2 Award in Number - Decimals	3847-21	600/7520/X
Level 2 Award in Number - Percentages	3847-21	600/7629/X
Level 2 Award in Measure, Shape and Space - Money, Time and Temperature	3847-21	600/7342/1
Level 2 Award in Measure, Shape and Space - Length, Weight and Capacity	3847-21	600/7343/3
Level 2 Award in Measure, Shape and Space - Shape and Space	3847-21	600/7346/9
Level 2 Award in Handling Data - Extract and Interpret Data	3847-21	600/7347/0
Level 2 Award in Handling Data - Collect and Use Data	3847-21	600/7344/5
Level 2 Award in Handling Data - Statistics	3847-21	600/7513/2
Level 2 Award in Handling Data - Probability	3847-21	600/7529/6

Awards - Themed

Title and level	City & Guilds number	Accreditation number (from 1st Jan 2013)
Awards in Mathematics Skills - Number		
Entry Level Award in Mathematics Skills - Number (Entry 1)	3847-23	600/7524/7
Entry Level Award in Mathematics Skills - Number (Entry 2)	3847-23	600/7494/2
Entry Level Award in Mathematics Skills - Number (Entry 3)	3847-23	600/7497/8
Level 1 Award in Mathematics Skills - Number	3847-23	600/7505/3
Level 2 Award in Mathematics Skills - Number	3847-23	600/7508/9
Awards in Mathematics Skills - Measure, Shape and Space		
Entry Level Award in Mathematics Skills - Measure, Shape and Space (Entry 1)	3847-23	600/7492/9
Entry Level Award in Mathematics Skills - Measure, Shape and Space (Entry 2)	3847-23	600/7495/4
Entry Level Award in Mathematics Skills - Measure, Shape and Space (Entry 3)	3847-23	600/7498/X
Level 1 Award in Mathematics Skills - Measure, Shape and Space	3847-23	600/7506/5
Level 2 Award in Mathematics Skills - Measure, Shape and Space	3847-23	600/7366/4
Awards in Mathematics Skills - Handling Data		
Entry Level Award in Mathematics Skills - Handling Data (Entry 1)	3847-23	600/7493/0
Entry Level Award in Mathematics Skills - Handling Data (Entry 2)	3847-23	600/7496/6
Entry Level Award in Mathematics Skills - Handling Data (Entry 3)	3847-23	600/7499/1
Level 1 Award in Mathematics Skills - Handling Data	3847-23	600/7507/7
Level 2 Award in Mathematics Skills - Handling Data	3847-23	600/7511/9

Certificates

Title and level	City & Guilds number	Accreditation number (from 1st Jan 2013)
Certificates in Mathematics Skills		
Entry Level Certificate in Mathematics Skills (Entry 1)	3847-22	600/7523/5
Entry Level Certificate in Mathematics Skills (Entry 2)	3847-22	600/7515/6
Entry Level Certificate in Mathematics Skills (Entry 3)	3847-22	600/7512/0
Level 1 Certificate in Mathematics Skills	3847-22	600/7514/4
Level 2 Certificate in Mathematics Skills	3847-22	600/7516/8

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1 Introduction

This document tells you what you need to do to deliver the Mathematics Skills (3847) qualifications.

The City & Guilds 3847 Awards/Certificates in Mathematics Skills (QCF) have been designed to create stepping stones for learners and to recognise and reward the progress that learners make on their journey.

City & Guilds has developed units and qualifications align to the principles outlined in the Skills Funding Agency statement of February 2012:

- a focus on the core mathematical skills needed to enable learners to progress towards achieving an A*-C GCSE or Level 2 Functional Mathematics qualification
- the necessary flexibility and responsiveness required by adult learners
- robust assessment of each of the skills areas covered in order to ensure rigour and to provide evidence of the skills gained
- a need to reflect, in the learning outcomes and assessment criteria, the existing national literacy and numeracy standards.

The qualifications comprise a broad range of small units, each underpinned by the National Standards for Adult Numeracy (QCA, 2005), and mapped to the Adult Numeracy Core Curriculum (DfES, 2001 - reviewed and later revised 2007) and have been mapped to the Functional Skills and GCSE subject criteria.

The Mathematics Skills qualifications cover the ability to:

- understand and use mathematical information
- calculate and manipulate mathematical information
- interpret results and communicate mathematical information.

The unit and qualification design allows learners a flexible approach to developing and certificating either specific skills areas or a broader range of skills, and provides an opportunity to respond to, develop and accredit skills according to an identified need.

Units are small with clear outcomes allowing for robust and rigorous assessment in each skill area.

Who are the qualifications for?

The main purpose of these qualifications is for candidates who need to develop mathematical skills at a level necessary to function and progress in life, work or in society in general. For many this will also support progression towards GCSE Mathematics or Level 2 Functional Mathematics learning.

What do the qualifications cover?

The qualifications cover the numerical skills identified in the National Standards for Adult Numeracy from Entry 1 to Level 2. They are also linked to the subject criteria for Functional Skills.

Are the qualifications part of a framework or initiative?

Not specifically, although the qualifications may provide a useful addition to Foundation Learning programmes.

Who did we develop the qualifications with?

The qualifications have been developed in association with a range of providers and employers.

What opportunities for progression are there?

The qualifications allow learners to progress:

- through the framework of Mathematics Skills qualifications from a learning programme for Entry 1 to a learning programme for Level 2
- a City & Guilds vocational qualification
- an Apprenticeship programme
- to employment
- towards a Level 2 Functional Skills qualification in Mathematics
- towards a GCSE in Mathematics.

These qualifications have been designed to allow flexibility as well as clear progression opportunities. All learners would be expected to undergo a thorough diagnostic assessment leading to a learning programme built from units that best match their skills needs. Given the breadth of units available, it is likely that an individual learner's programme would be highly personalised to their needs. In addition, as units sit on the Qualification and Credit Framework (QCF), and a learner's registration is live for 3 years, this gives them the ability to study flexibly, to gain skills and complete units at their own pace, and include breaks in learning where necessary.

Structure

For full details of units see the Unit Handbook.

Awards - single units

To achieve the **Entry Level Award in Number - Whole Numbers to 10 (Entry 1)** learners must achieve 2 credits from Unit (010)

To achieve the **Entry Level Award in Number - Addition (Entry 1)** learners must achieve 2 credits from Unit (011)

To achieve the **Entry Level Award in Number - Subtraction (Entry 1)** learners must achieve 2 credits from Unit (012)

To achieve the **Entry Level Award in Measure, Shape and Space - Money (Entry 1)** learners must achieve 1 credit from Unit (013)

To achieve the **Entry Level Award in Measure, Shape and Space - Time (Entry 1)** learners must achieve 1 credit from Unit (014)

To achieve the **Entry Level Award in Measure, Shape and Space - Size, Length, Width and Height (Entry 1)** learners must achieve 1 credit from Unit (015)

To achieve the **Entry Level Award in Measure, Shape and Space - Weight and Capacity (Entry 1)** learners must achieve 1 credit from Unit (016)

To achieve the **Entry Level Award in Measure, Shape and Space - Common Shapes and Positional Vocabulary (Entry 1)** learners must achieve 1 credit from Unit (017)

To achieve the **Entry Level Award in Handling Data - Extract and Sort Data (Entry 1)** learners must achieve 2 credits from Unit (018)

To achieve the **Entry Level Award in Handling Data - Represent Information (Entry 1)** learners must achieve 2 credits from Unit (019)

To achieve the **Entry Level Award in Number - Whole Numbers to 100 (Entry 2)** learners must achieve 2 credits from Unit (110)

To achieve the **Entry Level Award in Number - Addition (Entry 2)** learners must achieve 1 credit from Unit (111)

To achieve the **Entry Level Award in Number - Subtraction (Entry 2)** learners must achieve 1 credit from Unit (112)

To achieve the **Entry Level Award in Number - Fractions (Entry 2)** learners must achieve 1 credit from Unit (113)

To achieve the **Entry Level Award in Number - Multiplication (Entry 2)** learners must achieve 1 credit from Unit (114)

To achieve the **Entry Level Award in Measure, Shape and Space - Money (Entry 2)** learners must achieve 2 credits from Unit (115)

To achieve the **Entry Level Award in Measure, Shape and Space - Time (Entry 2)** learners must achieve 1 credit from Unit (116)

To achieve the **Entry Level Award in Measure, Shape and Space - Length (Entry 2)** learners must achieve 1 credit from Unit (117)

To achieve the **Entry Level Award in Measure, Shape and Space - Weight, Capacity and Temperature (Entry 2)** learners must achieve 1 credit from Unit (118)

To achieve the **Entry Level Award in Measure, Shape and Space - Shapes and Positional Vocabulary (Entry 2)** learners must achieve 1 credit from Unit (119)

To achieve the **Entry Level Award in Handling Data - Extract and Sort Data (Entry 2)** learners must achieve 2 credits from Unit (120)

To achieve the **Entry Level Award in Handling Data - Collect and Represent Information (Entry 2)** learners must achieve 2 credits from Unit (121)

To achieve the **Entry Level Award in Number - Whole Numbers to 1000 (Entry 3)** learners must achieve 2 credits from Unit (210)

To achieve the **Entry Level Award in Number - Addition and Subtraction (Entry 3)** learners must achieve 1 credit from Unit (211)

To achieve the **Entry Level Award in Number - Fractions (Entry 3)** learners must achieve 1 credit from Unit (212)

To achieve the **Entry Level Award in Number - Multiplication (Entry 3)** learners must achieve 1 credit from Unit (213)

To achieve the **Entry Level Award in Number - Division (Entry 3)** learners must achieve 1 credit from Unit (214)

To achieve the **Entry Level Award in Number - Decimals (Entry 3)** learners must achieve 1 credit from Unit (215)

To achieve the **Entry Level Award in Measure, Shape and Space - Money (Entry 3)** learners must achieve 1 credit from Unit (216)

To achieve the **Entry Level Award in Measure, Shape and Space - Temperature and Time (Entry 3)** learners must achieve 1 credit from Unit (217)

To achieve the **Entry Level Award in Measure, Shape and Space - Length, Weight, Capacity and Shapes (Entry 3)** learners must achieve 2 credits from Unit (218)

To achieve the **Entry Level Award in Handling Data - Extract and Sort Data (Entry 3)** learners must achieve 2 credits from Unit (219)

To achieve the **Entry Level Award in Handling Data - Represent Information (Entry 3)** learners must achieve 2 credits from Unit (220)

To achieve the **Level 1 Award in Number - Positive and Negative Numbers** learners must achieve 2 credits from Unit (310)

To achieve the **Level 1 Award in Number - Fractions, Ratio and Proportion** learners must achieve 2 credits from Unit (311)

To achieve the **Level 1 Award in Number - Decimals** learners must achieve 1 credit from Unit (312)

To achieve the **Level 1 Award in Number - Percentages** learners must achieve 1 credit from Unit (313)

To achieve the **Level 1 Award in Measure, Shape and Space - Money, Time and Temperature** learners must achieve 1 credit from Unit (314)

To achieve the **Level 1 Award in Measure, Shape and Space - Length, Weight and Capacity** learners must achieve 1 credit from Unit (315)

To achieve the **Level 1 Award in Measure, Shape and Space - Calculate Using Shape and Space** learners must achieve 2 credits from Unit (316)

To achieve the **Level 1 Award in Handling Data - Extract and Interpret Data** learners must achieve 1 credit from Unit (317)

To achieve the **Level 1 Award in Handling Data - Collect, Organise and Represent Data** learners must achieve 1 credit from Unit (318)

To achieve the **Level 1 Award in Handling Data - Mean and Range** learners must achieve 1 credit from Unit (319)

To achieve the **Level 1 Award in Handling Data - Probability** learners must achieve 1 credit from Unit (320)

To achieve the **Level 2 Award in Number - Number and Formulae** learners must achieve 1 credit from Unit (410)

To achieve the **Level 2 Award in Number - Fractions, Ratio and Proportion** learners must achieve 2 credits from Unit (411)

To achieve the **Level 2 Award in Number - Decimals** learners must achieve 1 credit from Unit (412)

To achieve the **Level 2 Award in Number - Percentages** learners must achieve 2 credits from Unit (413)

To achieve the **Level 2 Award in Measure, Shape and Space - Money, Time and Temperature** learners must achieve 1 credit from Unit (414)

To achieve the **Level 2 Award in Measure, Shape and Space - Length, Weight and Capacity** learners must achieve 1 credit from Unit (415)

To achieve the **Level 2 Award in Measure, Shape and Space - Shape and Space** learners must achieve 2 credits from Unit (416)

To achieve the **Level 2 Award in Handling Data - Extract and Interpret Data** learners must achieve 1 credit from Unit (417)

To achieve the **Level 2 Award in Handling Data - Collect and Use Data** learners must achieve 1 credit from Unit (418)

To achieve the **Level 2 Award in Handling Data - Statistics** learners must achieve 1 credit from Unit (419)

To achieve the **Level 2 Award in Handling Data - Probability** learners must achieve 1 credit from Unit (420)

Awards - Themed

Awards in Mathematics Skills - Number

To achieve the **Entry Level Award in Mathematics Skills Number (Entry 1)**, learners must achieve 6 credits from (010-012).

To achieve the **Entry Level Award in Mathematics Skills Number (Entry 2)**, learner must achieve 6 credits from (110-114).

To achieve the **Entry Level Award in Mathematics Skills - Number (Entry 3)**, learners must achieve 7 credits from (210-215).

To achieve the **Level 1 Award in Mathematics Skills - Number**, learners must achieve 6 credits from (310-313).

To achieve the **Level 2 Award in Mathematics Skills - Number**, learners must achieve 6 credits from (410-413).

Awards in Mathematics Skills - Measure, Shape and Space

To achieve the **Entry Level Award in Mathematics Skills - Measure, Shape and Space (Entry 1)**, learners must achieve 5 credits from (013-017).

To achieve the **Entry Level Award in Mathematics Skills - Measure, Shape and Space (Entry 2)**, learners must achieve 6 credits from (115-119).

To achieve the **Entry Level Award in Mathematics Skills - Measure, Shape and Space (Entry 3)**, learners must achieve 4 credits from (216-218).

To achieve the **Level 1 Award in Mathematics Skills - Measure, Shape and Space**, learners must achieve 4 credits from (314-316).

To achieve the **Level 2 Award in Mathematics Skills - Measure, Shape and Space**, learners must achieve 4 credits from (414-416).

Awards in Mathematics Skills - Handling Data

To achieve the **Entry Level Award in Mathematics Skills - Handling Data (Entry 1)**, learners must achieve 4 credits from (018-019).

To achieve the **Entry Level Award in Mathematics Skills - Handling Data (Entry 2)**, learners must achieve 4 credits from (120-121).

To achieve the **Entry Level Award in Mathematics Skills - Handling Data (Entry 3)**, learners must achieve 4 credits from (219-220).

To achieve the **Level 1 Award in Mathematics Skills - Handling Data**, learners must achieve 4 credits from (317-320).

To achieve the **Level 2 Award in Mathematics Skills - Handling Data**, learners must achieve 4 credits from (417-420).

Certificates in Mathematics Skills

To achieve the **Entry Level Certificate in Mathematics Skills (Entry 1)**, learners must achieve a minimum of 13 credits from (010-019, 110-112, 115-116,118-121). A minimum of 10 credits must come from 010-019).

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
010	Entry 1	Number - whole numbers to 10	2	cannot be taken with 110
011	Entry 1	Number - addition	2	cannot be taken with 111
012	Entry 1	Number - subtraction	2	cannot be taken with 112
013	Entry 1	Measure, shape and space - money	1	cannot be taken with 115
014	Entry 1	Measure, shape and space - time	1	cannot be taken with 116
015	Entry 1	Measure, shape and space - size length, width and height	1	
016	Entry 1	Measure, shape and space - weight and capacity	1	cannot be taken with 118
017	Entry 1	Measure, shape and space - common shapes and positional vocabulary	1	cannot be taken with 119
018	Entry 1	Handling data - extract and sort data	2	cannot be taken with 120
019	Entry 1	Handling data - represent information	2	cannot be taken with 121
110	Entry 2	Number - whole numbers to 100	2	cannot be taken with 010
111	Entry 2	Number - addition	1	cannot be taken with 011
112	Entry 2	Number - subtraction	1	cannot be taken with 012
115	Entry 2	Measure, shape and space - money	2	cannot be taken with 013
116	Entry 2	Measure, shape and space - time	1	cannot be taken with 014
118	Entry 2	Measure, shape and space - weight, capacity and temperature	1	cannot be taken with 016
119	Entry 2	Measure, shape and space - shapes and positional vocabulary	1	cannot be taken with 017
120	Entry 2	Handling data - extract and sort data	2	cannot be taken with 018
121	Entry 2	Handling data - collect and represent information	2	cannot be taken with 019

To achieve the **Entry Level Certificate in Mathematics Skills (Entry 2)**, learners must achieve a minimum of 15 credits from (010-019, 110-121, 210, 212, 213, 216, 219-220). A minimum of 12 credits must come from (110-121)

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
010	Entry 1	Number - whole numbers to 10	2	cannot be taken with 110 or 210
011	Entry 1	Number - addition	2	cannot be taken with 111
012	Entry 1	Number - subtraction	2	cannot be taken with 112
013	Entry 1	Measure, shape and space - money	1	cannot be taken with 115 or 216
014	Entry 1	Measure, shape and space - time	1	cannot be taken with 116
015	Entry 1	Measure, shape and space - size, length, width and height	1	cannot be taken with 117
016	Entry 1	Measure, shape and space - weight and capacity	1	cannot be taken with 118
017	Entry 1	Measure, shape and space - common shapes and positional vocabulary	1	cannot be taken with 119
018	Entry 1	Handling data - extract and sort data	2	cannot be taken with 120 or 219
019	Entry 1	Handling data - represent information	2	cannot be taken with 121 or 220
110	Entry 2	Number - whole numbers to 100	2	cannot be taken with 010 or 210
111	Entry 2	Number - addition	1	cannot be taken with 011
112	Entry 2	Number - subtraction	1	cannot be taken with 012
113	Entry 2	Number - fractions	1	cannot be taken with 212
114	Entry 2	Number - multiplication	1	cannot be taken with 213
115	Entry 2	Measure, shape and space - money	2	cannot be taken with 013 or 216
116	Entry 2	Measure, shape and space - time	1	cannot be taken with 014
117	Entry 2	Measure, shape and space - length	1	cannot be taken with 015
118	Entry 2	Measure, shape and space - weight, capacity and temperature	1	cannot be taken with 016
119	Entry 2	Measure, shape and space - shapes and positional vocabulary	1	cannot be taken with 017
120	Entry 2	Handling data - extract and sort data	2	cannot be taken with 018 or 219

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
121	Entry 2	Handling data - collecting and represent information	2	cannot be taken with 019 or 220
210	Entry 3	Number - whole numbers to 1000	2	cannot be taken with 010 or 110
212	Entry 3	Number - fractions	1	cannot be taken with 113
213	Entry 3	Number - multiplication	1	cannot be taken with 114
216	Entry 3	Measure, shape and space - money	4	cannot be taken with 013 or 115
219	Entry 3	Handling data - extract and use data	2	cannot be taken with 018 or 120
220	Entry 3	Handling Data - represent information	2	cannot be taken with 019 or 121

To achieve the **Entry Level Certificate in Mathematics Skills (Entry 3)**, learners must achieve a total of 13 credits from (110, 113-118, 120-121, 210-220, 311-312, 314-318). A minimum of 10 credits must come from (210-220).

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
110	Entry 2	Number - whole numbers to 100	2	cannot be taken with 210
113	Entry 2	Number - fractions	1	cannot be taken with 212 or 311
114	Entry 2	Number - multiplication	1	cannot be taken with 213
115	Entry 2	Measure, shape and space - money	2	cannot be taken with 216 or 314
116	Entry 2	Measure, shape and space - time	1	cannot be taken with 217 or 314
117	Entry 2	Measure, shape and space - length	1	cannot be taken with 118, 218, 315, 316
118	Entry 2	Measure, shape and space - weight, capacity and temperature	1	cannot be taken with 117, 218, 315, 316
120	Entry 2	Handling data - extract and sort data	2	cannot be taken with 219 or 317
121	Entry 2	Handling data - collecting and represent information	2	cannot be taken with 220 or 318
210	Entry 3	Number - whole numbers to 1000	2	cannot be taken with 110
211	Entry 3	Number - addition and subtraction	1	
212	Entry 3	Number - fractions	1	cannot be taken with 113 or 311

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
213	Entry 3	Number - multiplication	1	cannot be taken with 114
214	Entry 3	Number - division	1	
215	Entry 3	Number - decimals	1	cannot be taken with 312
216	Entry 3	Measure, shape and space - money	1	cannot be taken with 115 or 314
217	Entry 3	Measure, shape and space - temperature and time	1	cannot be taken with 116 or 314
218	Entry 3	Measure, shape and space - length, weight, capacity and shapes	2	cannot be taken with 117, 118, 315 or 316
219	Entry 3	Handling data - extract and use data	2	cannot be taken with 120 or 317
220	Entry 3	Handling data - represent information	2	cannot be taken with 121 or 318
311	Level 1	Number - fractions, ratio and proportion	2	cannot be taken with 212 or 113
312	Level 1	Number - decimals	1	cannot be taken with 215
314	Level 1	Measure, shape and space - money, time and temperature	1	cannot be taken with 115, 116, 216 or 217
315	Level 1	Measure, shape and space - length, weight and capacity	1	cannot be taken with 117, 118, 218
316	Level 1	Measure, shape and space - calculating using shape and space	2	cannot be taken with117, 118, 218
317	Level 1	Handling data - extract and interpret data	1	cannot be taken with 120 or 219
318	Level 1	Handling data - collect, organise and represent data	1	cannot be taken with 121 or 220

To achieve the **Level 1 Certificate in Mathematics Skills**, learners must achieve a minimum of 14 credits from (215-220, 310-320, 412-418, 420). A minimum of 10 credits must come from (310-320).

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
215	Entry 3	Number - decimals	1	cannot be taken with 312 or 412
216	Entry 3	Measure, shape and space - money	1	cannot be taken with 314 or 414
217	Entry 3	Measure, shape and space - temperature and time	1	cannot be taken with 314 or 414

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
218	Entry 3	Measure, shape and space - length, weight, capacity and shapes	2	cannot be taken with 315, 316, 415 or 416
219	Entry 3	Handling data - extract and use data	2	cannot be taken with 317 or 417
220	Entry 3	Handling data - represent information	2	cannot be taken with 318 or 418
310	Level 1	Number - positive and negative numbers	2	
311	Level 1	Number - fractions, ratio and proportion	2	
312	Level 1	Number - decimals	1	cannot be taken with 215 or 412
313	Level 1	Number - percentages		cannot be taken with 413
314	Level 1	Measure, shape and space - money, time and temperature	1	cannot be taken with 216, 217 or 414
315	Level 1	Measure, shape and space - length, weight and capacity	1	cannot be taken with 218 or 415
316	Level 1	Measure, shape and space - calculating using shape and space	2	cannot be taken with 218, 416
317	Level 1	Handling Data - extract and interpret data	1	cannot be taken with 219 or 417
318	Level 1	Handling data - collect, organise and represent data	1	cannot be taken with 220 or 418
319	Level 1	Handling data - mean and range	1	
320	Level 1	Handling data - probability	1	cannot be taken with 420
412	Level 2	Number - decimals	1	cannot be taken with215 or 312
413	Level 2	Number - percentages	2	cannot be taken with 313
414	Level 2	Measure, shape and space - money, time and temperature	1	cannot be taken with 216, 217 or 314
415	Level 2	Measure, shape and space - length, weight and capacity	1	cannot be taken with 218 or 315
416	Level 2	Measure, shape and space - shape and space	2	cannot be taken with 218, or 316
417	Level 2	Handling data - extract and interpret data	1	cannot be taken with 219 or 317
418	Level 2	Handling data - collect and use data	1	cannot be taken with 220 or 318
420	Level 2	Handling data - probability	1	cannot be taken with 320

To achieve the **Level 2 Certificate in Mathematics Skills**, learners must achieve a minimum of 13 credits from (311-318, 320, 410-420). A minimum of 10 credits must come from (410-420).

Unit No.	Unit level	Unit title	Credits	Excluded combination of units
311	Level 1	Number - fractions, ratio and proportion	2	cannot be taken with 411
312	Level 1	Number - decimals	1	cannot be taken with 412
313	Level 1	Number - percentages		cannot be taken with 413
314	Level 1	Measure, shape and space - money, time and temperature	1	cannot be taken with 414
315	Level 1	Measure, shape and space - length, weight and capacity	1	cannot be taken with 415
316	Level 1	Measure, shape and space - calculating using shape and space	2	cannot be taken with 416
317	Level 1	Handling data - extract and interpret data	1	cannot be taken with 417
318	Level 1	Handling data - collect, organise and represent data	1	cannot be taken with 418
320	Level 1	Handling data - probability	1	cannot be taken with 420
410	Level 2	Number - number and formulae	1	
411	Level 2	Number - fractions, ratio and proportion	2	cannot be taken with 311
412	Level 2	Number - decimals	1	cannot be taken with 312
413	Level 2	Number - percentages	2	cannot be taken with 313
414	Level 2	Measure, shape and space - money, time and temperature	1	cannot be taken with 314
415	Level 2	Measure, shape and space - length, weight and capacity	1	cannot be taken with 315
416	Level 2	Measure, shape and space - shape and space	2	cannot be taken with 316
417	Level 2	Handling data - extract and interpret data	1	cannot be taken with 317
418	Level 2	Handling data - collect and use data	1	cannot be taken with 318
419	Level 2	Handling data - statistics	1	
420	Level 2	Handling data - probability	1	cannot be taken with 320

2 Centre requirements

Approval

If your Centre is approved to offer the following qualifications:

- Functional Skills (3748)
- Adult Numeracy (3792)

you can apply for approval for the new Awards/Certificate in Mathematics Skills (3847-21/ 22/23) using the **Fast Track Approval Form**, available from the City & Guilds website.

Centres should use the Fast Track Form if:

- there have been no changes to the way the qualifications are delivered, and
- they meet all of the approval criteria in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After 12 months, the Centre will have to go through the standard Qualification Approval Process. The centre is responsible for checking that fast track approval is still current at the time of application.

To offer these qualifications, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualifications before designing a course programme.

2.1 Resource requirements

Human resources

To meet the quality assurance criteria for these qualifications, the centre must ensure that the following internal roles are undertaken:

- Quality Assurance Co-ordinator
- Trainer/Tutor
- Assessor (for internally assessed components)
- Internal Quality Assurer(s) (for internally assessed components).

These roles are defined more fully in the document 'Qualification and Systems Consultant Roles'

Further supporting quality assurance documents can be found here:
http://www.cityandguilds.com/Provide-Training/Centre-Support/Centre-Document-Library/Policies-and-Procedures/Quality-Assurance-Documents

Centre Staffing

Staff delivering these qualifications must be:

- competent in the Mathematics being taught and assessed
- fully conversant with the National Standards for Adult Numeracy and the subject criteria for Functional Skills Mathematics
- for any internal assessments, they must also be familiar with and be able to apply the marking/assessment criteria.

Teaching qualifications and subject specialist qualifications

It is good practice for staff to hold or be working towards a recognised teacher training qualification and/or relevant subject-specific teaching qualification, and depending on delivery setting/location this might be necessary to obtain public funding.

Centre staff may undertake more than one role, eg tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

Assessor and internal quality assurance qualifications

Assessor/Internal Quality Assurer TAQA qualifications are valued as qualifications for centre staff but they are not currently a requirement for these qualifications.

Continuing professional development (CPD)

Centres are expected to support their staff in ensuring that their knowledge of the skills standards, delivery and assessment requirements, remains current.

2.2 Learner entry requirements

There are no formal learner entry requirements for the Mathematics Skills qualifications. However, centres must ensure learners have the potential and opportunity to achieve these qualifications.

Age restrictions

These qualifications are intended for learners over the age of 16.

3 Delivering the qualification

Initial assessment and induction

Initial and diagnostic assessment of each learner should be conducted before the start of their programme to ensure they are working at the correct level, and that specific skills in need of development are clearly identified.

We recommend that centres provide an induction programme so that learners fully understand:

- the units/qualifications they will be working towards and how these relate to any identified skills in need of development
- the requirements of the units/qualifications
- their responsibilities as a candidate
- the responsibilities of the centre
- any possible progression routes.

This information can be recorded on a learning contract.

Learners also need to understand relevant centre policies and procedures, including health and safety and equality and diversity statements.

Support materials

The following resources are available for these qualifications:

Description	How to access
Promotional materials	**http://www.cityandguilds.com**
Fast track approval forms/generic approval form	**http://www.cityandguilds.com**
Candidate logbook	**http://www.cityandguilds.com**

For further information to assist with the planning and development of the programme, please refer to the following:

- Adult Numeracy core curriculum **http://www.excellencegateway.org.uk/node/1514**
- Numeracy Progression overview **http://www.excellencegateway.org.uk/node/14938**

Recording documents

Learners and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several e-portfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: **http://www.learningassistant.com/**.

Learner progress records and recording forms are available in the 3847 Logbook, available on the City & Guilds website **http://www.cityandguilds.com**.

Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the Qualification Consultant, before they are used by learners and assessors at the centre.

4 Assessment

4.1 Assessment Pack

There is a separate **assessment pack** for these qualifications which contains the following information:

- Qualifications and qualification pathways
- Unit list
- Initial assessment and induction
- Delivery guidance
- Learning programmes
- Role of the Assessor
- Planning assessment
- Preparing for assessment
- Marking assessments and providing feedback
- Evidence requirements
- Building a portfolio of evidence

To access the Assessment Pack please go to the City & Guilds website **www.cityandguilds.com**

At all levels, learners must complete a portfolio of evidence, demonstrating they have met the outcomes of each unit they have completed. This could be a paper based or electronic portfolio.

Assessors must read the detailed guidance specific to each assessment title
This is contained in the assessment pack and includes details of any materials or equipment learners will require, as well as assessment guidance.

4.2 Access Arrangements

There is no need to apply directly to City & Guilds for access arrangements. However, if learners require units in Braille or modified versions of the units (that cannot be arranged locally), then this must be applied for at least three months before the learner is due to start the unit. The three-month lead-in is necessary because the unit will often need to be prepared individually.

Centres must not order modifications to assessment materials unless they are confident that the learner will be ready to attempt the unit at that time.

Summary of permitted adjustments - Mathematics Skills

Learners can have access to all forms of equipment, software and practical assistance, such as a reader or a scribe that reflect their normal way of working, provided that these do not affect the reliability or validity of the units or give the learner an advantage over other learners undertaking the same or similar units.

The table below only lists provisions that should be regarded as an access arrangement. Please note all learners may use relevant ICT applications to produce their work.

Access Arrangement	Yes/No
Extra time	Yes
Reader	Yes
Oral Language Modifier	Yes
Sign Language Interpreter	Yes
Scribe	Yes
Transcript	Yes
Practical Assistant	Yes
Modified units (including Braille)	Yes
Models, visual/tactile aids, speaking scales	Yes

Other Information

Each component of Mathematics Skills eg number, handling data and measure, shape and space, can be completed in any order. Leaners are able to attempt and achieve each component at different levels (known as a spiky profile) according the rules of combination restrictions (see **Structure** section). Learners can achieve a full award in each component subject to the rules of combination.

Appendix 1 Relationships to other qualifications

Links to other qualifications

Mapping is provided as guidance and suggests areas of commonality between the qualifications. It does not imply that learners completing units in one qualification have automatically covered all of the content of another.

Mathematics Entry 1

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
Representing Understand simple mathematical information in familiar contexts and situations.	a) Understand and use numbers with one significant figure in practical contexts; b) Describe the properties of size and measure, including length, width, height and weight, and make simple comparisons; c) Describe position; d) Recognise and select coins and notes; e) Recognise and name common 2D and 3D shapes; f) Sort and classify objects practically using a single criterion.	Understanding and using mathematical information At this level, adults can: read and understand information given by numbers and symbols in simple graphical, numerical and written material specify and describe a practical problem or task using numbers and measures	• use whole numbers to measure and make observations • use space and shape to help understanding • use information from lists and simple diagrams to help understanding • copy a given process or routine to increase understanding	**Number - whole numbers to 10** Be able to count up to 10 items (N1/E1.1) • state numbers 0 - 10 in order • count items up to 10 • count on up to 10 Be able to read and write numbers up to 10 (N1/E1.2) • write numbers 0 - 10 • read numbers 0 - 10 Be able to compare numbers up to 10 (N1/E1.3) • arrange numbers in order of value • compare numbers **Number - addition** Be able to add single digit numbers with totals to 10 (N1/E1.4) • add number of given objects • state number bonds Be able to interpret + and = in practical situations for solving problems (N1/E1.6) • write signs + and = • work out problems that include signs + and =
Analysing 2. Use mathematics to obtain answers to simple given practical problems that are clear and routine. 3. Generate results that make sense for a specified task.		Calculating and manipulating mathematical information At this level, adults can: generate results which make sense and use given methods and given checking procedures appropriate to the specified purpose	use whole numbers • to count reliably up to 10 items • to read, write, order and compare numbers up to 10 including zero • to add single-digit numbers with totals to 10, and subtract single-digit numbers from numbers up to 10 • to interpret + – and = and in practical situations for solving problems use common measures • to recognise and select coins and notes • to relate familiar events to: – times of day (using o'clock times or parts of the day such as midday) – days of the week – seasons of the year • to describe size, e.g. large/small, and use direct comparisons for the size of at least two items, e.g.	

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
			larger/smaller • to describe length, width, height, e.g. long, short, wide, narrow, tall, and use direct comparisons for length, width, height of items, e.g. longer, too long, longest • to describe weight, e.g. heavy/light, and use direct comparisons for weight of items, e.g. heavier/lighter • to describe capacity, e.g. full/empty, and use direct comparisons for capacity of items, e.g. holds more than, holds less than use shape and space • to recognise and name common 2-D and 3-D shapes, e.g. a rectangle, square, circle, cube • to understand everyday positional vocabulary, e.g. between, inside or near to use data • extract simple information from lists • to sort and classify objects using a single criterion • to construct simple representations or diagrams using knowledge of numbers, measures or space and shape use a calculator • to check calculations using whole numbers	Be able to use a calculator to check addition calculations using whole numbers (N1/E1.7) • use a calculator to check addition answers **Number - subtraction** Be able to subtract single digit numbers from numbers up to 10 (N1/E1.5) • take away number of given objects • state subtraction facts Be able to interpret – and =in practical situations for solving problems (N1/E1.6) • write the signs – and = • work out problems that include signs – and = Be able to use a calculator to check subtraction calculations using whole numbers (N1/E1.7) • use a calculator to check subtraction answers using whole numbers **Measure, shape and space - money** Be able to recognise coins (MSS1/E1.1) • identify 1p, 2p, 5p and 10p coins • identify £1 and £2 coins • select coins for different contexts Be able to recognise notes (MSS1/E1.1) • identify £5 and £10 notes • select notes for different contexts

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
Interpreting 4. Provide solutions to simple given practical problems in familiar contexts and situations.		Interpreting results and communicating mathematical information At this level, adults can: present and explain results which show an understanding of the intended purpose using appropriate numbers, measures, objects or pictures	use whole numbers to present results • use appropriate vocabulary for common measures to describe quantities • use objects or simple images to present results • reach a suitable outcome	**Measure, shape and space - time** Be able to relate familiar events to times of the day (MSS1/E1.2) • state something usually done in the morning • state something usually done in the afternoon • state something usually done in the evening • give an o'clock time for an activity Be able to relate familiar events to days of the week (MSS1/E1.2) • state the days of the week • order the days of the week • state the day of the week an activity occurs Be able to relate familiar events to seasons of the year (MSS1/E1.2) • state the seasons of the year • state the season in which an event occurs. **Measure, shape and space – size, length, width and height** Be able to compare sizes of items (MSS1/E1.3) • use words to describe size • compare items in terms of size Be able to compare length of items (MSS1/E1.4) • use words to describe length • compare items in terms of length

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	Coverage and range	Numeracy standards	skills	Unit outcomes and assessment criteria
				Be able to compare width of items (MSS1/E1.4) • use words to describe width • compare items in terms of width Be able to compare height of items (MSS1/E1.4) • use words to describe height • compare items in terms of height **Measure, shape and space - weight and capacity** Be able to compare weight of items (MSS1/E1.5) • use words to describe weight • compare items in terms of weight Be able to compare capacity of items (MSS1/E1.6) • use words to describe capacity • compare items in terms of capacity **Measure, shape and space - common shapes and positional vocabulary** Be able to name common 2D shapes (MS2/E1.1) • name common 2D shapes in a range of orientations Be able to name common 3D shapes (MS2/E1.1) • name common 3D shapes in a range of orientations

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to use every day positional vocabulary (MS2/E1.2) • recognise words that explain position • use words that explain position for given situations **Handling data - extract and sort data** Be able to extract simple information from lists (HD1/E1.1) • select information from lists ordered numerically • select numerical information from lists ordered in different ways Be able to sort objects using a single criterion (HD1/E1.2) • sort given objects by single criterion **Handling data - represent information** Be able to construct simple lists (HD1/E1.3) • create simple list Be able to represent information numerically (HD1/E1.3) • present information numerically Be able to construct pictorial representations (HD1/E1.3) • represent information pictorially • create a simple pictogram

Mathematics Entry 2

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
Representing 1. Understand simple practical problems in familiar contexts and situations. 2. Select basic mathematics to obtain answers.	a) Understand and use whole numbers with up to two significant figures; b) Understand and use addition/subtraction in practical situations; c) Use doubling and halving in practical situations; d) Recognise and use familiar measures, including time and money; e) Recognise sequences of numbers, including odd and even numbers; f) Use simple scales and measure to the nearest labelled division; g) Know properties of simple 2D and 3D shapes; h) Extract information from simple lists.	Understanding and using mathematical information At this level, adults can: read and understand information given by numbers, symbols, simple diagrams and charts in graphical, numerical and written material specify and describe a practical problem or task using numbers, measures and simple shapes to record essential information	use whole numbers and simple fractions to measure and make observations • use space and shape to record simple information • use information from lists, tables, simple diagrams and block graphs to help understanding • collect simple numerical information to help understanding • follow a given process or routine	**Number - whole numbers to 100** Be able to count up to 20 items (N1/E2.1) • state numbers 0 - 20 in order • count items up to 20 • count on up to 20 Be able to read numbers up to 100 (N1/E2.2) • read numbers 0-100 Be able to write numbers up to 100 (N1/E2.2) • write numbers 0-100 in numerals Be able to order numbers up to 100 (N1/E2.2) • arrange numbers in order of value • compare numbers Be able to approximate numbers to the nearest 10 (N1/E2.6) • round numbers to the nearest 10 **Number - addition** Know addition facts to 10 (N1/E2.4) • state pairs of numbers that add up to 10 Be able to interpret + and = in practical situations to solve problems (N1/E2.7) • write the signs + and =
Analysing 3. Use basic mathematics to obtain answers to simple given practical problems that are clear and routine. 4. Generate results to a given level of accuracy. 5. Use given checking procedures.		Calculating and manipulating mathematical information At this level, adults can: generate results to a given level of accuracy using given methods and given checking procedures appropriate to the specified purpose	An adult will be expected to: Use whole numbers • to count reliably up to 20 items • to read, write, order and compare numbers up to 100 • to add and subtract two-digit whole numbers • to recall addition and subtraction facts to 10 • to multiply using single-digit whole numbers • to approximate by rounding to the nearest 10 • to use and interpret +, –, x, and = in practical situations for solving problems Use fractions • to read, write and compare halves and quarters of quantities • to find halves and quarters of small numbers of items or shapes	

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
			Use common measures • to make amounts of money up to £1 in different ways using 1p, 2p, 5p, 10p, 20p and 50p coins • to calculate the cost in pence of more than one item, e.g. two stamps at 27p, and the change from a transaction, e.g. change from £1 • to calculate the cost in whole pounds of more than one item, e.g. two tickets at £6, and the change from a transaction, e.g. change from £20 • to read and record time in common date formats, and understand time displayed on analogue and 12-hour digital clocks in hours, half hours and quarter hours • to estimate, measure and compare length using common standard and non-standard units, e.g. metre, centimetre, paces • to estimate, measure and compare weight using common standard units, e.g. kilogram • to estimate, measure and compare capacity using common standard and non-standard units, e.g. litre, cupful • to read and compare positive temperatures in everyday situations such as weather charts • to read simple scales to the nearest labelled division	• list words that mean addition • work out problems including signs + and = Be able to add two digit whole numbers (N1/E2.3) • add together single digit numbers with two digit whole numbers • add together whole numbers with two digits Be able to use a calculator to check addition calculations using whole numbers (N1/E2.8) • use a calculator to check answers in addition calculations **Number - subtraction** Know subtraction facts to 10 (N1/E2.4) • state subtraction facts for numbers with totals to 10 Be able to interpret – and = in practical situations to solve problems (N1/E2.7) • write the signs – and = • list words that mean subtraction • work out problems using – and = Be able to subtract from two digit whole numbers (N1/E2.3) • subtract single digit numbers from two digit numbers • subtract two digit numbers from whole numbers with two digits

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
			Use shape and space • to recognise and name 2-D and 3-D shapes, e.g. triangles, cylinders, pyramids • to describe the properties of common 2-D and 3-D shapes, e.g. the number of sides, corners, faces • to use positional vocabulary, e.g. giving simple instructions Use data • to extract information from lists, tables, simple diagrams and block graphs • to make numerical comparisons from block graphs • to sort and classify objects using two criteria • to represent information so that it makes sense to others, e.g. in lists, tables and diagrams use a calculator • to check calculations using whole numbers	Be able to use a calculator to check subtraction calculations using whole numbers (N1/E2.8) • use a calculator to check answers for given subtraction calculations **Number - fractions** Be able to read and write halves and quarters of quantities (N2/E2.1) • convert fractions to words • write fractions as numbers and symbols Be able to find halves and quarters of shapes (N2/E2.1) • state the number of halves it takes to make one whole • state the number of quarters it takes to make one whole • find halves of shapes • find quarters of shapes Be able to compare halves and quarters of quantities (N2/E2.1) • find halves of given quantities • find quarters of given quantities • compare halves and quarters of given quantities Be able to find halves and quarters of small numbers of items (N2/E2.1) • work out halves of given amounts • work out quarters of given amounts
. Interpreting 6. Describe solutions to simple given practical problems in familiar contexts and situations		Interpreting results and communicating mathematical information At this level, adults can: present and explain results which show an understanding of the intended purpose using appropriate numbers, measures, objects or pictures	Use whole numbers and common fractions to present results • use common measures and units of measure to define quantities • use tables, simple charts and diagrams to present results • follow a given routine to reach an appropriate outcome	

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Number - multiplication Be able to interpret x and = in practical situations to solve problems (N1/E2.7) • write the signs x and = • list words which mean 'multiplication' • work out given problems including the signs x and = Be able to multiply using single-digit whole numbers (N1/E2.5) • multiply single digit whole numbers Be able to use a calculator to check multiplication calculations using whole numbers (N1/E2.8) • use a calculator to check answers for given multiplication calculations **Measure, shape and space - money** Be able to add amounts of money up to £1 • count out coins to make amounts up to £1 (MSS1/E2.1) Be able to calculate the cost in pence of more than one item (MSS1/E2.2) • work out the cost in pence of more than one item Be able to calculate the change in pence from transactions (MSS1/E2.2) • work out the change in pence from different transactions

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to calculate the cost in whole pounds of more than one item (MSS1/E2.2) • work out the cost in whole pounds of more than one item Be able to calculate the change in whole pounds from a transaction (MSS1/E2.2) • work out the change in whole pounds from different transactions **Measure, shape and space - time** Be able to order the months of the year • state the months of the year in order • match month of year to numerical position Be able to record time in common date formats (MSS1/E2.3) • read dates in different formats • write dates in different formats Be able to read time displayed on analogue clocks (MSS1/E2.4) • read time displayed on analogue clocks in hours • read time displayed on analogue clocks in half hours • read time displayed on analogue clocks in quarter hours

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to read time displayed on 12-hour digital clocks (MSS1/E2.4) • read time displayed on 12 hour digital clocks in hours • read time displayed on 12-hour digital clocks in half hours • read time displayed on 12-hour digital clocks in quarter hours **Measure, shape and space - length** Be able to measure length (MSS1/E2.9) • use measuring instruments with simple scales • measure length in common standard units • record measurements Be able to compare length using standard and non-standard units (MSS1/E2.5) • estimate length • compare length in common standard units with non-standard units Be able to write units of measurement (MSS1/E2.6) • write units of measurement in full • recognise units of measurement written in abbreviated form

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Measure, shape and space - weight, capacity and temperature Be able to compare weight using common standard units (MSS1/E2.6) • estimate weight in kilograms • measure weight to the nearest kilogram • compare weight in kilograms • recognise kilogram in abbreviated form • record weight Be able to compare capacity using common standard and non-standard units (MSS/E2.7) • estimate capacity in litres and non-standard units • measure capacity in litres • compare capacity in litres with non-standard units • recognise litre in abbreviated form • record capacity Be able to compare positive temperatures (MSS1/E2.8) • identify units used for measuring temperature • write units used for measurement of temperature • compare temperatures

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Measure, shape and space - shapes and positional vocabulary Be able to recognise 2D shapes (MSS2/E2.1 & MSS2/E2.2) • identify common 2D shapes in a range of orientations • describe properties of common 2D shapes Be able to recognise 3D shapes (MSS2/E2.1 & MSS2/E2.2) • identify common 3D shapes in a range of orientations and sizes • describe properties of common 3D shapes Be able to use positional vocabulary (MSS2/E2.3) • write words that explain position • give directions using positional words **Handling data - extract and sort data** Be able to extract information from lists and tables • select information from lists and tables Be able to extract information from diagrams • select information from simple diagrams

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to make numerical comparisons from block graphs (HD1/E2.1& HD1/E2.2) • select information from block graphs • compare numerical information obtained from block graphs Be able to sort objects using two criteria (HD1/E2.3) • sort given objects by two criteria **Handling data - collect and represent information** Be able to collect numerical information (HD1/E2.4) • collect numerical information • record information Be able to represent information (HD1/E2.5) • construct a simple table of information • construct a simple diagram • construct a simple bar chart

Mathematics Entry 3

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
Representing 1. Understand practical problems in familiar contexts and situations. 2. Begin to develop own strategies for solving simple problems. 3. Select mathematics to obtain answers to simple given practical problems that are clear and routine.	a) Add and subtract using three-digit numbers; b) Solve practical problems involving multiplication and division by 2, 3, 4, 5 and 10; c) Round to the nearest 10 or 100.	Understanding and using mathematical information At this level, adults can: read and understand information given by numbers, symbols, diagrams and charts used for different purposes and in different ways in graphical, numerical and written material specify and describe a practical problem or task using numbers, measures and diagrams to collect and record relevant information	An adult will be expected to: • use whole numbers, fractions and decimals to measure and make observations • use space and shape to record information • use numerical information from lists, tables, diagrams and simple charts to help understanding • make observations and record numerical information using a tally • use given materials and methods	**Number - whole numbers to 1000** Be able to count up to 1000 (N1/E3.1) • state numbers 0-1000 given in digit form • count in tens from any number below 1000 • count in hundreds from any number below 1000 Be able to read numbers up to 1000 (N1/E3.1) • read numbers written in numerical form
Analysing 4. Apply mathematics to obtain answers to simple given practical problems that are clear and routine. 5. Use simple checking procedures.	d) Understand and use simple fractions; e) Understand, estimate, measure and compare length, capacity, weight and temperature; f) Understand decimals to two decimal places in practical contexts; g) Recognise and describe number	Calculating and manipulating mathematical information At this level, adults can: generate results to a given level of accuracy using given methods, measures and checking procedures appropriate to the specified purpose	An adult will be expected to: use whole numbers • to count, read, write, order and compare numbers up to 1000 • to add or subtract using three-digit numbers • to recall addition and subtraction facts to 20 • to multiply two-digit whole numbers by single-digit whole numbers • to divide two-digit whole numbers by single-digit whole numbers and interpret remainders • to recall multiplication facts, e.g. multiples of 2, 3, 4, 5, 10 • to approximate by rounding numbers less than 1000 to the nearest 10 or 100	Be able to match numbers in figures and words up to 1000 (N1/E3.1) • match numbers in figures to numbers in words Be able to compare numbers up to 1000 (N1/E3.1) • arrange numbers in order of value • compare numbers Be able to approximate by rounding (N1/E3.7) • round numbers to the nearest 10 • round numbers to the nearest 100

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
	patterns; h) Complete simple calculations involving money and measures. i) Recognise and name simple 2D and 3D shapes and their properties; j) Use metric units in everyday situations; k) Extract, use and compare information from lists, tables, simple charts and simple graphs.		• to estimate answers to calculations • to use and interpret +, –, x, ÷ and = in practical situations for solving problems use fractions • to read, write and understand common fractions, e.g. 3/4, 2/3, 1/10 • to recognise and use equivalent forms, e.g. 5/10 = 1/2 use decimals • to read, write and understand decimals up to two decimal places in practical contexts (such as common measures to one decimal place, e.g. 1.5m; money in decimal notation, e.g. £2.37) use common measures • to estimate, calculate and compare money by: – adding and subtracting sums using decimal notation – rounding sums to the nearest £1, 10p – making approximate calculations • to read, measure and record time using: – am and pm and common date formats – digital clocks and analogue clocks to the nearest 5 minute intervals • to read, estimate, measure and compare length, capacity,	**Number - addition and subtraction** Know addition facts up to 20 (N1/E3.3) • state addition facts up to 20 Be able to add three digit whole numbers (N1/E3.2) • add together three-digit whole numbers without the use of a calculator Be able to use + and = in practical situations to solve problems • list words that mean addition • use symbols to record whole number calculations when solving addition problems Know subtraction facts (N1/E3.3) • state pairs of subtraction facts for numbers with totals to 20 Be able to subtract whole numbers (N1/E3.2) • subtract single digit numbers from three digit whole numbers • subtract two digit numbers from three digit whole numbers • subtract three digit whole numbers from three digit whole numbers Be able to use – and = in practical situations to solve problems (E1/E3.9) • list words that mean subtraction • use symbols to record whole number calculations when solving subtraction problems

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
			weight and temperature using non-standard and standard units, e.g. distance on road signs, simple scales to the nearest labelled or unlabelled division • to choose and use appropriate units and measuring instruments use shape and space • to sort 2-D and 3-D shapes to solve practical problems using properties, e.g. lines of symmetry, side length, angles use data • to extract numerical information from lists, tables, diagrams and simple charts • to make numerical comparisons from bar charts and pictograms • to organise and represent information in different ways so that it makes sense to others use electronic or mechanical aids • to calculate using whole numbers and decimals to solve problems in context • to check calculations	Be able to use a calculator to solve problems • use a calculator to find answers to addition problems • use a calculator to find answers to subtraction problems • use a calculator to check calculations Be able to approximate answers to calculations • use approximation in calculations to estimate answers **Number - fractions** Be able to read and write common fractions (N2/E3.1) • read common fractions • write common fractions • define the term denominator • define the term numerator Be able to use equivalent fractions (N2/E3.2) • identify equivalent fractions • find equivalent fractions in everyday contexts
Interpreting 6. Interpret and communicate solutions to practical problems in familiar contexts and situations.		Interpreting results and communicating mathematical information At this level, adults can: present and explain results which meet the intended purpose using appropriate numbers,	An adult will be expected to: • use whole numbers, common fractions and decimals to present results • use common measures and units of measure to define quantities • use tables, charts and diagrams to	**Number - multiplication** Know multiplication facts (N1/E3.5) • state multiplication facts

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
		diagrams, charts and symbols	present results, e.g. for amounts and sizes • use given methods to check results • use given methods to present results • use appropriate methods and forms to describe outcomes	Be able to multiply whole numbers without the use of a calculator (N1/E3.4) • multiply two digit whole numbers by single digit whole numbers without the use of a calculator Be able to use x and = in practical situations to solve multiplication problems (NZ/E3.9 / N1/E3.4) • list words that mean multiplication • use symbols to record whole number calculations when solving multiplication problems • solve multiplication problems using a calculator • check solutions to problems using a calculator Be able to estimate answers to multiplication calculations (N1/E3.8) • use approximation in multiplication calculations to estimate answers **Number - division** Be able to work out whole number calculations which give remainders (N1/E3.6) • divide two digit whole numbers by single digit whole numbers • interpret remainders

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to use ÷ and = in practical situations to solve division problems (N1/E3.9) • list words that mean division • use symbols to record whole number calculations when solving division problems • solve division problems without the use of a calculator • check solutions to problems without the use of a calculator Be able to use a calculator to solve division problems • use a calculator to find solutions to division problems • use a calculator to check calculations Be able to estimate answers to calculations N2/E3.8) • use approximation in division calculations to estimate answers **Number - decimals** Be able to read and write decimals up to two decimal places (N2/E3.3) • read decimals • write common measures in decimal form • write money in decimal form • identify place value in a decimal number

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to use a calculator to solve problems using whole numbers and decimals (N2/E3.4) • use a calculator to solve problems with whole numbers and decimals • use a calculator to check calculations **Measure, shape and space - money** Be able to use decimal notation to express monetary value • read prices written as decimals • record money using decimal notation • identify place value in a decimal number Be able to add amounts of money expressed as pounds and pence (MSS1/E3.1) • add amounts of money without the use of a calculator • add amounts of money using a calculator Be able to subtract amounts of money expressed as pounds and pence (N2/E3.4) • subtract one amount of money from another without the use of a calculator • subtract one amount of money from another using a calculator • check calculations using a calculator

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to round sums of money (MSS1/3.2) • round sums of money to the nearest pound • round sums of money to the nearest 10 pence **Measure, shape and space - temperature and time** Be able to record temperature (MSS1/E3.9) • state unit of measurement of temperature • read temperatures using measuring instruments • record temperatures Be able to compare temperatures (MSS1/E3.9) • compare the temperatures of different places Be able to record time (MSS1/3.3) • read times written in am and pm • measure time in common time and date formats • record time in common time and date formats

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Measure, shape and space - length, weight, capacity and shapes Know units of measurement • list standard and non-standard units of measurement for length • list standard and non-standard units of measurement for weight • list standard and non-standard units of measurement for capacity Be able to compare length using standard and non-standard units • read measurements on measuring instruments • record measurements of length • approximate measurements of length in standard and non-standard units • compare length Be able to compare weight using common standard units • read measurements of weight • approximate measurements of weight • measure weight using an appropriate measuring instrument • compare weight

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to compare capacity using common standard and non-standard units • read measurements of capacity • approximate measurements of capacity • measure capacity using an appropriate measuring instrument • record capacity • compare capacity Be able to recognise the properties of 2D shapes • describe the properties of 2D shapes • sort 2D shapes to solve practical problems Be able to recognise the properties of 3D shapes • describe the properties of 3D shapes • sort 3D shapes to solve practical problems **Handling data - extract and use data** Be able to extract numerical information from a range of sources (HD1/E3.1) • obtain information from lists and tables • obtain information from diagrams • obtain information from simple charts

Functional Skills		National numeracy standards		City & Guilds Mathematics Skills
Skills standard	**Coverage and range**	**Numeracy standards**	**skills**	**Unit outcomes and assessment criteria**
				Be able to make numerical comparisons from bar charts (HD1/E3.2) • identify title and labels on bar charts • extract required information from bar charts • compare information obtained from bar charts Be able to make numerical comparisons from pictograms • state the meaning of the 'key' on pictograms • extract required information from pictograms • compare information obtained from pictograms **Handling data - represent information** Be able to collect and record numerical information (HD1/E3.3) • collect numerical information • use a tally chart to record information Be able to represent information in a range of different formats (HD1/E3.4) • construct a table • construct a diagram • construct a chart • construct a pictogram

Mathematics at L1

GCSE Mathematics			Functional Skills		Mathematics Skills
Assessment Outcomes		**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
AO1	Recall and use their knowledge of the prescribed content.	**Number and algebra** • add, subtract, multiply and divide any number; • order rational numbers; • use the concepts and vocabulary of factor (divisor), multiple, common factor, highest common factor, least common multiple, prime number and prime factor decomposition; • use the terms square, positive and negative square root, cube and cube root; • use index notation for squares, cubes and powers of ten; • use index laws for multiplication and division of integer • understand equivalent fractions, simplifying a fraction by cancelling all common factors; • add and subtract fractions; • use decimal notation and recognise that each terminating decimal is a fraction; • recognise that recurring decimals are exact fractions, and that some exact fractions are recurring decimals; • understand that 'percentage' means 'number of parts per 100' and use this to compare proportions; • use percentages • interpret fractions, decimals and percentages as operators; • use ratio notation, including reduction to its simplest form and its various links to fraction notation;	**Representing** 1. Understand practical problems in familiar and unfamiliar contexts and situations, some of which are non-routine. 2. Identify and obtain necessary information to tackle the problem. 3. Select mathematics in an organised way to find **solutions.**	a) Understand and use whole numbers and understand negative numbers in practical contexts; b) Add, subtract, multiply and divide whole numbers using a range of strategies; c) Understand and use equivalences between common fractions, decimals and percentages; d) Add and subtract decimals up to two decimal places; e) Solve simple problems involving ratio, where one number is a multiple of the other; f) Use simple formulae expressed in words for one- or two-step operations; g) Solve problems requiring calculation with common measures, including money, time, length, weight, capacity and temperature; h) Convert units of measure in the same system; i) Work out areas and perimeters in	**Number - positive and negative numbers** Be able compare numbers up to seven digits (N1/L1.1) • recognise numbers up to seven digits written in digit form and in words • write numbers up to seven digits in digit form and in words • arrange numbers in order of value • use > to describe two different numbers up to seven digits • use < to describe two different numbers up to seven digits Be able to identify negative numbers in everyday situations (N1/L1.2) • define negative numbers • state the everyday situations when negative numbers are used Be able to add and subtract whole numbers up to seven digits (N1/L1.3) • add whole numbers up to seven digits using written and calculator methods • subtract whole numbers up to seven digits using written and calculator methods • check calculations using a calculator

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	• understand and use number operations and the relationships between them, including inverse operations and hierarchy of operations; • divide a quantity in a given ratio; • approximate to specified or appropriate degrees of accuracy including a given power of ten, number of decimal places and significant figures; • use calculators effectively and efficiently, including statistical; • distinguish the different roles played by letter symbols in algebra, using the correct notation; • distinguish in meaning between the words equation, formula and expression; • manipulate algebraic expressions by collecting like terms, by multiplying a single term over a bracket, and by taking out common factors; • set up and solve simple equations; • derive a formula, substitute numbers into a formula and change the subject of a formula; • solve linear inequalities in one variable, and represent the solution set on a number line; • use systematic trial and improvement to find approximate solutions of equations where there is no simple analytical method of solving them; • generate terms of a sequence using term-to-term and position-to-term definitions of the sequence; • use linear expressions to describe the nth		practical situations; j) Construct geometric diagrams, models and shapes; k) Extract and interpret information from tables, diagrams, charts and graphs; l) Collect and record discrete data and organise and represent information in different ways;	Be able to multiply whole numbers (N1/L1.3) • multiply whole numbers up to six digits by 10 without the use of a calculator • multiply whole numbers up to five digits by 100 without the use of a calculator • multiply two digit whole numbers by two digit whole numbers without the use of a calculator • check calculations using a calculator • check calculations without the use of a calculator Know multiplication facts (N1/L1.5 & N1/L1.6) • state multiplication facts up to 10 x 10 • state multiples of 2 to 9 up to 100 • state multiples of 10, 50, 100 and 1000 • state square numbers up to 10 x 10 Be able to divide whole numbers (N1/L1.4) • divide whole numbers up to seven digits by 10 without the use of a calculator • divide whole numbers up to seven digits by 100 without the use of a calculator

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	term of an arithmetic sequence; • use the conventions for coordinates in the plane and plot points in all four quadrants, including using geometric information; • recognise and plot equations that correspond to straight-line graphs in the coordinate plane, including finding gradients; • construct linear functions from real-life problems and plot their corresponding graphs; • discuss, plot and interpret graphs (which may be non-linear) modelling real situations; • generate points and plot graphs of simple quadratic functions, and use these to find approximate solutions. **Geometry and measures** • recall and use properties of angles at a point, angles at a point on a straight line (including right angles), perpendicular lines and opposite angles at a vertex; • understand and use the angle properties of parallel and intersecting lines, triangles and quadrilaterals; • calculate and use the sums of the interior and exterior angles of polygons; • recall the properties and definitions of special types of quadrilateral, including square, rectangle, parallelogram, trapezium, kite and rhombus; • recognise reflection and rotation symmetry of 2D shapes; • understand congruence and similarity;			• divide whole numbers up to seven digits by whole numbers of any value using written and calculator methods • check calculations using a calculator • check calculations without the use of a calculator Be able to approximate by rounding (N1/L1.8) • round whole numbers up to seven digits to the nearest: o10 o100 o1000 o1 000 000 Be able to estimate answers to a range of calculations (N1/L1.9) • use approximation in addition calculations to estimate answers without the use of a calculator • use approximation in subtraction calculations to estimate answers without the use of a calculator • use approximation in multiplication calculations to estimate answers without the use of a calculator • use approximation in division calculations to estimate answers without the use of a calculator

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	• use Pythagoras' theorem in 2D and 3D; • distinguish between centre, radius, chord, diameter, circumference, tangent, arc, sector and segment; • use 2D representations of 3D shapes; • describe and transform 2D shapes using single or combined rotations, reflections, translations, or enlargements by a positive scale factor and distinguish properties that are preserved under particular transformations; • use and interpret maps and scale drawings; • understand the effect of enlargement for perimeter, area and volume of shapes and solids; • interpret scales on a range of measuring instruments and recognise the inaccuracy of measurements; • convert measurements from one unit to another; • make sensible estimates of a range of measures; • understand and use bearings; • understand and use compound measures; • measure and draw lines and angles; • draw triangles and other 2D shapes using a ruler and protractor; • use straight edge and a pair of compasses to do constructions; • construct loci; • calculate perimeters and areas of shapes made from triangles and rectangles; • find circumferences and areas of circles; • calculate volumes of right prisms and of			**Number - fractions, ratio and proportion** Be able to read mixed numbers • read common fractions in digit form • read mixed numbers in digit form • state the everyday situations when common fractions and mixed numbers are used Be able to write mixed numbers (N2/L1.1) • write common fractions in digit form • write mixed numbers in digit form Be able compare fractions and mixed numbers (N2/L1.1) • arrange common fractions and mixed numbers in digit form in order of value • use > to describe common fractions and mixed numbers in digit form • use < to describe common fractions and mixed numbers in digit form

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	shapes made from cubes and cuboids; **Statistics and probability** • understand and use statistical problem solving process/handling data cycle; • identify possible sources of bias; • design an experiment or survey; • design data-collection sheets, distinguishing between different types of data; • extract data from printed tables and lists; • design and use two-way tables for discrete and grouped data; • produce charts and diagrams for various data types; • calculate median, mean, range, mode and modal class; • interpret a wide range of graphs and diagrams and draw conclusions; • look at data to find patterns and exceptions; • recognise correlation and draw and/or use lines of best fit by eye, understanding what these represent; • compare distributions and make inferences; • compare distributions and make inferences; • understand and use the vocabulary of probability and the probability scale; • understand and use estimates or measures of probability from theoretical models (including equally likely outcomes), or from relative frequency; • list all outcomes for single events, and for two successive events, in a systematic way and derive related probabilities;			Know equivalencies between common fractions, percentages and decimals (N2/L1.3) • state the equivalent percentages and decimals of given fractions • state the equivalent decimals and fractions of given percentages • state the equivalent percentages and fractions of given decimals • calculate fractions of whole numbers Be able to work out simple ratio and direct proportion (N1/L1.9) • use simple ratio expressed in the form of three parts to one part in calculations • scale quantities by a factor of two **Number - decimals** Be able to read decimal numbers up to three places (N2/L1.4) • recognise decimals in everyday situations • read decimals Be able to write decimals up to three places (N2/L1.4) • write decimals in digit form

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	• identify different mutually exclusive outcomes and know that the sum of the probabilities of all these outcomes is 1; • compare experimental data and theoretical probabilities; • understand that if they repeat an experiment, they may – and usually will – get different outcomes, and that increasing sample size generally leads to better estimates of probability and population characteristics.			Be able to compare decimals to three places (N2/L1.4) • arrange decimals in digit form in order of value • use > to describe different decimals in digit form • use < to describe different decimals in digit form Be able to add and subtract decimals up to two places (N2/L1.5) • add decimals using written and calculator methods • subtract decimals using written and calculator methods Be able to multiply decimals up to two places (N2/L1.6) • multiply decimals by up to two digit whole numbers using written and calculator methods • multiply decimals by 10 and 100 without the use of a calculator Be able to divide decimals up to two places (N2/L1.6) • divide decimals by single digit whole numbers using written and calculator methods • divide decimals by 10 and 100 without the use of a calculator

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to approximate decimals by rounding (N2/L1.7) • round decimals to whole numbers • round decimals to two decimal places **Number - percentages** be able to recognise percentages • define percentages • recognise the everyday situations when percentages are used be able to write percentages (N2/L1.8) • write whole number percentages in digit form be able to compare whole number percentages (N2/L1.8) • arrange percentages in order of value • use > to describe different percentages in digit form • use < to describe different percentages in digit form be able to recognise simple percentage increase and decrease (N2/L1.8) • state the everyday situations when a percentage increase is used • state the everyday situations when a percentage decrease is used

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to find whole number percentage parts of quantities and measurements (N2/L1.9) • calculate percentage parts of quantities using written and calculator methods • calculate percentage parts of measurements using written and calculator methods Be able to find whole number percentage increases (N2/L1.10) • calculate a percentage increase using a written and calculator method Be able to find whole number percentage decreases (N2/L1.10) • calculate a percentage decrease using a written and calculator method **Measure, shape and space - money, time and temperature** Be able to calculate amounts of money expressed in pounds and pence (MSS1/L1.1) • add amounts of money • subtract amounts of money • multiply amounts of money in pounds and pence by one and two digit numbers • divide amounts of money in pounds and pence by one and two digit numbers

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to record time (MSS1/L1.2) • record time in standard British formats • select measuring instruments to measure and record time • measure time in seconds and minutes • add time in hours and minutes using 24 hour clock format • subtract time in hours and minutes using 24 hour clock format • record time using a 24 hour clock format • record time using a 12 hour clock format Be able to record temperature (MSS1/L1) • list units of measurement for temperature • select measuring instruments to measure and record temperature • measure temperature • record temperature in different units of measurement

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Measure, shape and space - length, weight and capacity Be able to record length (MSS1/L1.4) • select instruments for measuring length • measure length in a range of different contexts • record length using appropriate units • convert units of measurement within the same system of measurement Be able to record weight (MSS1/L1.4) • select instruments for measuring weight • measure weight in a range of different contexts • record weight using appropriate units • convert units of measurement within the same system of measurement Be able to record capacity (MSS1/L1.4) • select instruments for measuring capacity • measure capacity in a range of different contexts • record capacity using appropriate units • convert units of measurement within the same system of measurement

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to carry out calculations within the same system of measurement (MSS1/L1.4) • add within the same system of measurement • subtract within the same system of measurement **Measure, shape and space - calculating using shape and space** Be able to solve problems using the mathematical properties of regular 2D shapes (MSS2/L1.1) • identify the properties of 2D squares and rectangles • solve problems using properties of squares and rectangles Be able to draw 2D shapes in different orientations using grids (MSS2/L1.1) • use grids to draw squares and rectangles in different orientations Be able to calculate the perimeters of simple shapes (MSS1/L1.2 & MSS1/L1.8) • define perimeter • list common units of measurement for perimeter • describe the methods used to calculate the perimeters of simple shapes

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				• calculate perimeters of rectangles • calculate perimeters of triangles • calculate perimeters of squares be able to calculate the areas of rectangles (MSS1/L1.9) • list common units of measurement for area • state the formula in words for calculating the area of a rectangle • calculate areas of rectangles Be able to calculate volumes of simple shapes (MSS1/L1.10) • list common units of measure for volume • list cuboid shapes used in everyday situations • label dimensions of a cuboid • state the formula in words for finding out the volume of a cuboid • calculate the volume of a cuboid

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Handling data - extract and interpret data Be able to interpret information from a range of sources (HD1/L1.1) • extract information from different sources • interpret information from tables • interpret information from diagrams • interpret information from bar charts and pie charts • interpret information from single line graphs **Handling data - collect, organise and represent data** Be able to record discrete data (HD1/L1.2) • select methods for collecting discrete data • select methods for recording discrete data • record collected discrete data Be able to represent discrete data (HD1/L1.2) • organise data for representation • select scales to represent data • construct tables • construct charts • construct diagrams

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Handling data - mean and range Be able to find the arithmetical average (mean) for sets of data (HD1/L1.3) • define the term 'average' • state the everyday contexts when the term 'average' is used • calculate the means for different sets of given data • identify the factors that can distort the mean value Be able to find the arithmetical range for sets of data (HD1/L1.4) • define the term 'range' • state the everyday contexts in which the term 'range' is used • calculate the ranges for different sets of given data **Handling data - probability** Be able to show that some events are more likely to occur than others (HD2/L1.1) • provide examples of events that are certain to happen • provide examples of events that are impossible • provide examples of events that are more likely to occur than others

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to express the likelihood of an event occurring (HD2/L1.2) • plot the likelihood of events occurring on a probability scale of 0 to 1 • describe the methods used to calculate the probability of an event occurring • express the probability of given events occurring as a fraction • express the probability of given events occurring as a decimal • express the probability of given events occurring as a percentage

Mathematics at L2

GCSE Mathematics			Functional Skills		Mathematics Skills
Assessment Outcomes		**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
AO1	Recall and use their knowledge of the prescribed content.	**Number and algebra** • add, subtract, multiply and divide any number; • order rational numbers; • use the concepts and vocabulary of factor (divisor), multiple, common factor, highest common factor, least common multiple, prime number and prime factor decomposition; • use the terms square, positive and negative square root, cube and cube root; • use index notation for squares, cubes and powers of ten; • use index laws for multiplication and division of integer, fractional and negative powers; • interpret, order and calculate with numbers written in standard index form; • understand equivalent fractions, simplifying a fraction by cancelling all common factors; • add and subtract fractions; • use decimal notation and recognise that each terminating decimal is a fraction; • recognise that recurring decimals are exact fractions, and that some exact fractions are recurring decimals; • understand that 'percentage' means 'number of parts per 100' and use this to compare proportions; • use percentage, repeated proportional change; • understand and use direct and indirect proportion; • interpret fractions, decimals and percentages as operators; • use ratio notation, including reduction to its simplest form and its various links to fraction notation;	**Representing** 1. Understand routine and non-routine problems in familiar and unfamiliar contexts and situations. 2. Identify the situation or problems and identify the mathematical methods needed to solve them. 3. Choose from a range of mathematics to find solutions.	a) Understand and use positive and negative numbers of any size in practical contexts; b) Carry out calculations with numbers of any size in practical contexts, to a given number of decimal places; c) Understand, use and calculate ratio and proportion, including problems involving scale; d) Understand and use equivalences between fractions, decimals and percentages; e) Understand and use simple formulae and equations involving one- or two-step operations; f) Recognise and use 2D representations of 3D objects; g) Find area, perimeter and volume of common shapes; h) Use, convert and calculate using metric and, where appropriate, imperial measures;	**Number - number and formulae** Be able to compare positive and negative numbers of any value in practical contexts (N1/L2.1) • record positive numbers of any value in digit form • record negative numbers of any value in digit form • arrange positive and negative numbers in order of value • compare positive and negative numbers of any value Be able to carry out calculations with numbers of any value (N1/L2.10) • carry out calculations involving two or more operations in a sequence using written and calculator methods • check calculations using a calculator • use memory functions of a calculator in two step calculations
AO2	Select and apply mathematical methods in a range of contexts.		**Analysing** 4. Apply a range of mathematics to find solutions. 5. Use appropriate checking procedures and evaluate their effectiveness at each stage.		
AO3	Interpret and analyse problems and generate strategies		**Interpreting** 6. Interpret and communicate solutions to multi-stage practical problems in familiar and unfamiliar contexts and situations.		

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
to solve them.	• understand and use number operations and the relationships between them, including inverse operations and hierarchy of operations; • use surds and π in exact calculations; • calculate upper and lower bounds; • divide a quantity in a given ratio; • approximate to specified or appropriate degrees of accuracy including a given power of ten, number of decimal places and significant figures; • use calculators effectively and efficiently, including statistical and trigonometrical functions; • distinguish the different roles played by letter symbols in algebra, using the correct notation; • distinguish in meaning between the words equation, formula, identity and expression; • manipulate algebraic expressions by collecting like terms, by multiplying a single term over a bracket, and by taking out common factors, multiplying two linear expressions, factorising quadratic expressions including the difference of two squares, and simplifying rational expressions; • set up and solve simple equations including simultaneous equations in two unknowns; • solve quadratic equations; • derive a formula, substitute numbers into a formula and change the subject of a formula; • solve linear inequalities in one or two variables, and represent the solution set on a number line or suitable diagram; • use systematic trial and improvement to find approximate solutions of equations where there is no simple analytical method of solving them; • generate terms of a sequence using term-to-term and position-to-term definitions of the sequence;	7. Draw conclusions and provide mathematical justifications.	i) Collect and represent discrete and continuous data, using ICT where appropriate; j) Use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using ICT where appropriate; k) Use statistical methods to investigate situations; l) Use probability to assess the likelihood of an outcome.	Be able to make substitutions in given formulae to produce results (N1/L2.4) • substitute numerical values for words and symbols in a given formula without brackets • carry out operations within calculations in the correct order • multiply when there is no operator between a number and one or more variables • evaluate simple formulae using brackets • evaluate simple expressions involving more than one variable **Number - fractions, ratio and proportion** Be able to use fractions to compare amounts and quantities (N2/L2.1) • use factors to reduce a fraction to its simplest form • use fractions with the same denominators to order amounts • use fractions with different denominators to order quantities • use fractions to compare amounts • use fractions to compare quantities

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	• use linear expressions to describe the nth term of an arithmetic sequence; • use the conventions for coordinates in the plane and plot points in all four quadrants, including using geometric information; • recognise and plot equations that correspond to straight-line graphs in the coordinate plane, including finding gradients; • understand that the form y = mx + c represents a straight line and that m is the gradient of the line and c is the value of the y-intercept; • understand the gradients of parallel lines; • find the intersection points of the graphs of a linear and quadratic function, knowing that these are the approximate solutions of the corresponding simultaneous equations representing the linear and quadratic functions; • draw, sketch, recognise graphs of simple cubic functions, the reciprocal function y = x1 with x0, the function y = k≠ x for integer values of x and simple positive values of k, the trigonometric functions y = sin x and y = cos x; • construct the graphs of simple loci; • construct linear, quadratic and other functions from real-life problems and plot their corresponding graphs; • discuss, plot and interpret graphs (which may be non-linear) modelling real situations; • generate points and plot graphs of simple quadratic functions, and use these to find approximate solutions. **Geometry and measures** • recall and use properties of angles at a point, angles			Be able to use equivalences between fractions, decimals and percentages (N2/L2.2) • convert a given fraction to a decimal and a percentage • convert a given decimal to a fraction and a percentage • convert a given percentage to a fraction and a decimal • arrange fractions, decimals and percentages in order of value • calculate parts of whole numbers Be able to evaluate one number as a fraction of another (N2/L2.3) • calculate a number as a fraction of another giving the answer in its simplest form Be able to use fractions to add and subtract amounts and quantities (N2/L2.4 & N2/L2.10) • use fractions to add amounts without a calculator • use fractions to subtract quantities without a calculator • use a calculator to add and subtract fractions • use a calculator to check fraction calculations

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	at a point on a straight line (including right angles), perpendicular lines and opposite angles at a vertex; • understand and use the angle properties of parallel and intersecting lines, triangles and quadrilaterals; • calculate and use the sums of the interior and exterior angles of polygons; • recall the properties and definitions of special types of quadrilateral, including square, rectangle, parallelogram, trapezium, kite and rhombus; • recognise reflection and rotation symmetry of 2D shapes; • understand congruence and similarity; • use Pythagoras' theorem in 2D and 3D; • use the trigonometrical ratios and the sine and cosine rules to solve 2D and 3D problems; • distinguish between centre, radius, chord, diameter, circumference, tangent, arc, sector and segment; • understand and construct geometrical proofs using circle theorems; • use 2D representations of 3D shapes; • describe and transform 2D shapes using single or combined rotations, reflections, translations, or enlargements by a positive scale factor then use positive fractional and negative scale factors and distinguish properties that are preserved under particular transformations; • use and interpret maps and scale drawings; • understand and use the effect of enlargement for perimeter, area and volume of shapes and solids; • interpret scales on a range of measuring instruments and recognise the inaccuracy of measurements; • convert measurements from one unit to another; • make sensible estimates of a range of measures; • understand and use bearings;			Be able to calculate ratio and direct proportion (N1/L2.3) • calculate the number of parts in a given ratio • calculate quantities using ratio in the form of a:b:c • calculate direct proportion **Number - decimals** Be able to compare decimals (N2/L2.5 & N2/L2.10) • round numbers with three decimal places to two decimal places • round numbers with two decimal places to one decimal place • round numbers with one decimal place to a whole number • round answers from a calculator to an appropriate degree of accuracy • order decimals up to three places • compare decimals up to three places

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	• understand and use compound measures; • measure and draw lines and angles; • draw triangles and other 2D shapes using a ruler and protractor; • use straight edge and a pair of compasses to do constructions; • construct loci; • calculate perimeters and areas of shapes made from triangles and rectangles and other shapes; • calculate the area of a triangle using ½ ab sin C; • find circumferences and areas of circles; • calculate volumes of right prisms and of shapes made from cubes and cuboids; • solve mensuration problems involving more complex shapes and solids. **Statistics and probability** • understand and use statistical problem solving process/handling data cycle; • identify possible sources of bias; • design an experiment or survey; • design data-collection sheets, distinguishing between different types of data; • extract data from printed tables and lists; • design and use two-way tables for discrete and grouped data; • produce charts and diagrams for various data types; • calculate median, mean, range, quartiles and inter-quartile range, mode and modal class; • interpret a wide range of graphs and diagrams and draw conclusions; • look at data to find patterns and exceptions;			Be able to add and subtract decimals up to three places (N2/L2.6) • add decimals using efficient written methods • subtract decimals using efficient written methods • add decimals using efficient calculator methods • subtract decimals using efficient calculator methods Be able to multiply and divide decimals to three places (N2/L2.6 & N2/L2.10) • multiply decimals by numbers of any value using efficient written methods • divide decimals by numbers of any value using efficient written methods • multiply decimals by numbers of any value using efficient calculator methods • divide decimals by numbers of any value using efficient calculator methods

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
	• recognise correlation and draw and/or use lines of best fit by eye, understanding what these represent; • compare distributions and make inferences; • compare distributions and make inferences; • understand and use the vocabulary of probability and the probability scale; • understand and use estimates or measures of probability from theoretical models (including equally likely outcomes), or from relative frequency; • list all outcomes for single events, and for two successive events, in a systematic way and derive related probabilities; • identify different mutually exclusive outcomes and know that the sum of the probabilities of all these outcomes is 1; • know when to add or multiply two probabilities: if A and B are mutually exclusive, then the probability of A or B occurring is P(A) + P(B), whereas if A and B are independent events, the probability of A and B occurring is P(A) × P(B); • use tree diagrams to represent outcomes of compound events, recognising when events are independent; • compare experimental data and theoretical probabilities; • understand that if they repeat an experiment, they may – and usually will – get different outcomes, and that increasing sample size generally leads to better estimates of probability and population characteristics.			**Number - percentages** Be able to compare percentages (N2/L2.7) • order percentages for different situations • compare percentages for different situations Be able to calculate percentage increases and decreases (N2/L2.7) • calculate percentage increases for different situations • calculate percentage decreases for different situations • calculate results of percentage changes in different situations Be able to find percentage parts of quantities and measurements (N2/L2.8 & N2/L2.10) • calculate percentage parts of quantities and measurements using efficient written methods • calculate percentage parts of quantities and measurements using efficient calculator methods • calculate percentage parts of quantities and measurements using quick methods Be able to evaluate one number as a percentage of another (N2/L2.9) • calculate one number as a percentage of another

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Measure, shape and space - money, time and temperature Be able to calculate amounts of money of any value expressed in pounds and pence (MSS1/L2.1) • calculate amounts of money involving two or more operations in a sequence using efficient written and calculator methods Be able to convert between currencies (MSS1/L2.1) • convert from sterling to different currencies • convert to sterling from different currencies Be able to record time in different formats (MSS1/L2.2) • state the different units of time • state the relationship between units of time • calculate durations of time in hours and minutes for a series of events using 12 hour and 24 hour clock formats • calculate durations of time using a calendar • record durations of time in different formats

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to record temperature (MSS1/L2.4) • select units for measurement of temperature • measure temperature • record temperature in different units of temperature • calculate temperature differences within the same system • calculate temperature differences between different systems using conversion tables and scales **Measure, shape and space - length, weight and capacity** Be able to compare lengths of any size (MSS1/L2.3 & MSS1/L2.6) • select degree of accuracy for measuring length in different contexts • measure length using metric units • compare length using metric units • carry out calculations involving units within the same system • carry out calculations involving units between imperial and metric systems using conversion tables and scales • use conversion factors

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to compare weight (MSS1/L2.3, MSS1/L2.5 & MSS1/L2.6) • select degree of accuracy for measuring weight in different contexts • measure weight using metric units • compare weight using metric units • carry out calculations involving units within the same system • carry out calculations involving units between imperial and metric systems using conversion tables and scales • use conversion factors Be able to compare capacity (MSS1/L2.3, MSS1/L2.5 & MSS1/L2.6) • select degree of accuracy for measuring capacity in different contexts • measure capacity using metric units • compare capacity using metric units • carry out calculations involving units within the same system • carry out calculations involving units in imperial and metric systems using conversion tables and scales • use conversion factors

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Measure, shape and space - shape and space Be able to use given formulae expressed in letters and symbols (MSS1/L2.7, MSS1/L2.8 7 MSS1/L2.9) • calculate perimeters of regular shapes using given formulae • calculate areas of regular shapes using given formulae • calculate areas of composite shapes using given formulae • calculate volumes of cuboids and cylinders using given formulae Be able to work out dimensions from scale drawings (MSS1/L2.10) • use scales on drawings to calculate actual measurements Be able to use common 2D representations of 3D objects (MSS2/L2.1 & MSS2/L2.2) • list 3D objects represented in 2D form • use 2D representations of 3D objects Be able to solve problems involving 2D shapes and parallel lines • identify parallel lines on common 2D shapes • use the properties of parallel lines to solve problems

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Handling data - extract and interpret data Be able to interpret discrete data and continuous data (HD1/L2.1) • define discrete data • define continuous data • extract discrete and continuous data from different sources • interpret information from complex tables • interpret information from diagrams • interpret information from composite bar charts • interpret information from line graphs with more than one line **Handling data - collect and use data** Be able to represent discrete data (HD1/L2.2) • collect discrete data from a range of sources • organise discrete data for representation • construct complex tables • construct pie charts • construct composite bar charts • construct scale diagrams • describe the effects of using different scales in representations

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Be able to represent continuous data (HD1/L2.2) • collect continuous data from a range of sources • represent continuous data in a line graph • identify trends from an analysis of the slope of the line **Handling data - statistics** Be able to compare the mean, median and mode (HD1/L2.3) • find the mean for sets of data • find the median for sets of data • find the mode sets of data • compare the mean, median and mode for different sets of data • state the different purposes for which the mean, median and mode can be used Be able to use the range to describe the spread within two sets of data (HD1/L2.3 & HD1/L2.4) • calculate the range of sets of data • compare the ranges of sets of data

GCSE Mathematics		Functional Skills		Mathematics Skills
Assessment Outcomes	**Skills**	**Skill standards**	**Coverage and range**	**Outcomes**
				Handling data - probability Be able to identify the range of possible outcomes of independent events (HD2/L2.1) • state the possible outcomes when events are independent • record the outcomes of an independent event Be able to identify the range of possible outcomes of combined events (HD2/L2.1) • state the possible outcomes when events are combined • record the possible outcomes of combined events in tables • record the possible outcomes of combined events in tree diagrams

Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of learners
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for learners who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden**: how to register and certificate learners on line
- **Qualifications and Credit Framework (QCF)**: general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for GOLA/e-volve assessments.

City & Guilds

Believe you can

www.cityandguilds.com

Useful contacts

UK learners **General qualification information**	**T: +44 (0)844 543 0033** **E: learnersupport@cityandguilds.com**
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: **intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **centresupport@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: **singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **walledgarden@cityandguilds.com**
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: **business@cityandguilds.com**
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Land Based Services (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

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