

## Ascentis Entry Level 3 Award in Mathematical Skills Ascentis Entry Level 3 Extended Award in Mathematical Skills

- Developing and Applying Number Skills
- Developing and Applying Addition and Subtraction Skills
- Multiplication of Whole Numbers
- Division of Whole Numbers
- Developing and Applying Fraction Skills
- Developing and Applying Decimal Skills
- Money: Adding and Subtracting
- Time
- Measure: Distance and Length
- Measure: Capacity and Temperature
- Developing and Applying Shape and Space Skills
- Data Handling: Recording and Representing Data
- Data Handling: Extracting and Interpreting Data

## Ascentis Entry 3 Certificate in Mathematical Skills

### Specification

**Ofqual Number** (See page 4 of the specification)

Ofqual Start Date	01/09/2013
Ofqual Review Date	31/07/2020
Ofqual Certification Review Date	31/07/2021

## ABOUT ASCENTIS

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Ascentis was originally established in 1975 as OCNW, a co-operative scheme between Universities and Colleges of Further Education. Ascentis was the first 'Open College' in the UK and served the needs of its members for over 34 years. Throughout this period, OCNW grew yet maintained its independence in order that it could continue to respond to the requirements of its customers and provide a consistently high standard of service to all centres across the country and in recent years to its increasing cohorts of overseas learners.

In 2009 OCNW became Ascentis - a company limited by guarantee and a registered educational charity.

**Ascentis** is distinctive and unusual in that it is both

- **An Awarding Organisation** regulated by the Office of Qualifications and Examinations Regulation (Ofqual)

and

- **an Access Validating Agency (AVA)** for 'Access to HE Programmes' licensed by the Quality Assurance Agency for Higher Education (QAA).

Ascentis is therefore able to offer a comprehensive ladder of opportunities to centres and their students, including Foundation Learning, vocational programmes and progressing to QAA recognised Access to HE qualifications. The flexible and adult-friendly ethos of Ascentis has resulted in centres throughout the UK choosing to run its qualifications.

## ASCENTIS CONTACT DETAILS

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## ASCENTIS ENTRY 3 AWARDS IN MATHEMATICAL SKILLS

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### Introduction

The Ascentis Entry 3 Awards in Mathematical Skills and the Entry 3 Certificate in Mathematical Skills are ideal qualifications for adults and young people wishing to develop their mathematical skills at Entry 3. They are intended to aid progression to further study through Mathematics Functional Skills qualifications. The Ascentis Entry 3 Awards in Mathematical Skills are a range of small qualifications which have been designed to 'bridge the gap' in learners' mathematical knowledge, thus focussing on developing confidence and ability.

There are several features of these qualifications that make them very appropriate for their target learners

- Wide range of single unit Awards – 13 in total
- Relatively short qualifications of 10 guided learning hours – bite sized learning
- Can be delivered either as a classroom based course or as a blended learning programme
- Assessed by completion of Ascentis designed assessment – no portfolio of evidence required
- Verification and certification can be offered throughout the year, allowing maximum flexibility for centres

### Aims

The aims of this suite of qualifications are to enable learners

- 1 To gain underpinning mathematical skills
- 2 To bridge the gap in their mathematical knowledge
- 3 To prepare for the completion of the Functional Skills in Mathematics at Entry 3
- 4 To progress onto the Ascentis Level 1 Awards in Mathematical Skills
- 5 To develop the skills required to move into the world of work or work-based learning

### Target Group

These qualifications are aimed at a range of learners, including:

- Adults who wish to develop and demonstrate their skills in Mathematics
- Young people aged 14 – 19 who wish to develop and demonstrate their skills in some aspects of Mathematics.

### Ofqual Qualification Numbers

Ascentis Entry 3 Award in Mathematical Skills - Developing and Applying Number Skills	601/0982/8
Ascentis Entry 3 Award in Mathematical Skills - Developing and Applying Addition and Subtraction Skills	601/1033/8
Ascentis Entry 3 Award in Mathematical Skills - Multiplication of Whole Numbers	601/0983/X
Ascentis Entry 3 Award in Mathematical Skills - Division of Whole Numbers	601/0980/4
Ascentis Entry 3 Award in Mathematical Skills - Developing and Applying Fraction Skills	601/0976/2
Ascentis Entry 3 Award in Mathematical Skills - Developing and Applying Decimal Skills	601/1034/X
Ascentis Entry 3 Award in Mathematical Skills - Money: Adding and Subtracting	601/0981/6
Ascentis Entry 3 Award in Mathematical Skills - Time	601/0984/1
Ascentis Entry 3 Award in Mathematical Skills - Measure: Distance and Length	601/0979/8
Ascentis Entry 3 Award in Mathematical Skills - Measure: Capacity and Temperature	601/0978/6
Ascentis Entry 3 Award in Mathematical Skills - Developing and Applying Shape and Space Skills	601/0977/4
Ascentis Entry 3 Award in Mathematical Skills - Data Handling: Recording and Representing Data	601/0975/0
Ascentis Entry 3 Award in Mathematical Skills - Data Handling: Extracting and Interpreting Data	601/0974/9
Ascentis Entry 3 Award in Mathematical Skills	601/3840/3
Ascentis Entry 3 Extended Award in Mathematical Skills	601/3841/5
Ascentis Entry 3 Certificate in Mathematical Skills	601/1030/2

## Rationale for the Rules of Combination

Learners must complete one unit for each Award at Entry 3. These are single unit qualifications and certification is given for achieving a pass in the Ascentis designed assessment.

Learners who achieve all 13 credits may wish to claim an Entry 3 Certificate in Mathematical Skills.

## Rules of Combination

### Ascentis Entry 3 Award in Mathematical Skills – Developing and Applying Number Skills

Title	Level	Credit Value	GLH	Unit ref
Applying Number Skills	E3	1	10	Y/505/4004

### Ascentis Entry 3 Award in Mathematical Skills – Developing and Applying Addition and Subtraction Skills

Title	Level	Credit Value	GLH	Unit ref
Applying Addition and Subtraction Skills	E3	1	10	R/505/4003

### Ascentis Entry 3 Award in Mathematical Skills - Multiplication Whole Numbers

Title	Level	Credit Value	GLH	Unit ref
Multiplication of Whole Numbers	E3	1	10	L/505/4016

### Ascentis Entry 3 Award in Mathematical Skills – Division of Whole Numbers

Title	Level	Credit Value	GLH	Unit ref
Division of Whole Numbers	E3	1	10	K/505/4010

### Ascentis Entry 3 Award in Mathematical Skills – Developing and Applying Fraction Skills

Title	Level	Credit Value	GLH	Unit ref
Applying Fraction Skills	E3	1	10	F/505/3090

### Ascentis Entry 3 Award in Mathematical Skills – Developing and Applying Decimal Skills

Title	Level	Credit Value	GLH	Unit ref
Developing and Applying Decimal Skills	E3	1	10	J/505/2247

### Ascentis Entry 3 Award in Mathematical Skills – Money: Adding and Subtracting

Title	Level	Credit Value	GLH	Unit ref
Money: Adding and Subtracting	E3	1	10	L/505/3089

**Ascentis Entry 3 Award in Mathematical Skills – Time**

Title	Level	Credit Value	GLH	Unit ref
Time	E3	1	10	Y/505/4567

**Ascentis Entry 3 Award in Mathematical Skills – Measure: Distance and Length**

Title	Level	Credit Value	GLH	Unit ref
Measuring and Estimating: Distance and Length	E3	1	10	J/505/4564

**Ascentis Entry 3 Award in Mathematical Skills – Measure: Capacity and Temperature**

Title	Level	Credit Value	GLH	Unit ref
Measure: Capacity and Temperature	E3	1	10	A/505/4013

**Ascentis Entry 3 Award in Mathematical Skills – Developing and Applying Shape and Space Skills**

Title	Level	Credit Value	GLH	Unit ref
Applying Shape and Space Skills	E3	1	10	D/505/4005

**Ascentis Entry 3 Award in Mathematical Skills – Data Handling: Recording and Representing Data**

Title	Level	Credit Value	GLH	Unit ref
Data Handling: Recording and Representing Data	E3	1	10	T/505/4009

**Ascentis Entry 3 Award in Mathematical Skills - Data Handling: Extracting and Interpreting Data**

Title	Level	Credit Value	GLH	Unit ref
Data Handling: Extracting and Interpreting Data	E3	1	10	M/505/4008

### Ascentis Entry 3 Award in Mathematical Skills

Minimum credits: 3  
Maximum credits: 5

Title	Level	Credit Value	GLH	Unit ref
Applying Number Skills	E3	1	10	Y/505/4004
Applying Addition and Subtraction Skills	E3	1	10	R/505/4003
Multiplication of Whole Numbers	E3	1	10	L/505/4016
Division of Whole Numbers	E3	1	10	K/505/4010
Applying Fraction Skills	E3	1	10	F/505/3090
Developing and Applying Decimal Skills	E3	1	10	J/505/2247
Money: Adding and Subtracting	E3	1	10	L/505/3089
Time	E3	1	10	Y/505/4567
Measuring and Estimating: Distance and Length	E3	1	10	J/505/4564
Measure: Capacity and Temperature	E3	1	10	A/505/4013
Applying Shape and Space Skills	E3	1	10	D/505/4005
Data Handling: Recording and Representing Data	E3	1	10	T/505/4009
Data Handling: Extracting and Interpreting Data	E3	1	10	M/505/4008

Credits from equivalent Units:  
Please contact the Ascentis office to request equivalences, and ask to speak to a member of the Qualifications Development Team.

### Ascentis Entry 3 Extended Award in Mathematical Skills

Minimum credits: 6  
Maximum credits: 12

Title	Level	Credit Value	GLH	Unit ref
Applying Number Skills	E3	1	10	Y/505/4004
Applying Addition and Subtraction Skills	E3	1	10	R/505/4003
Multiplication of Whole Numbers	E3	1	10	L/505/4016
Division of Whole Numbers	E3	1	10	K/505/4010
Applying Fraction Skills	E3	1	10	F/505/3090
Developing and Applying Decimal Skills	E3	1	10	J/505/2247
Money: Adding and Subtracting	E3	1	10	L/505/3089
Time	E3	1	10	Y/505/4567
Measuring and Estimating: Distance and Length	E3	1	10	J/505/4564
Measure: Capacity and Temperature	E3	1	10	A/505/4013
Applying Shape and Space Skills	E3	1	10	D/505/4005
Data Handling: Recording and Representing Data	E3	1	10	T/505/4009
Data Handling: Extracting and Interpreting Data	E3	1	10	M/505/4008

Credits from equivalent Units:  
Please contact the Ascentis office to request equivalences, and ask to speak to a member of the Qualifications Development Team.

## Ascentis Entry 3 Certificate in Mathematical Skills

Credits: 13

Title	Level	Credit Value	GLH	Unit ref
Applying Number Skills	E3	1	10	Y/505/4004
Applying Addition and Subtraction Skills	E3	1	10	R/505/4003
Multiplication of Whole Numbers	E3	1	10	L/505/4016
Division of Whole Numbers	E3	1	10	K/505/4010
Applying Fraction Skills	E3	1	10	F/505/3090
Developing and Applying Decimal Skills	E3	1	10	J/505/2247
Money: Adding and Subtracting	E3	1	10	L/505/3089
Time	E3	1	10	Y/505/4567
Measuring and Estimating: Distance and Length	E3	1	10	J/505/4564
Measure: Capacity and Temperature	E3	1	10	A/505/4013
Applying Shape and Space Skills	E3	1	10	D/505/4005
Data Handling: Recording and Representing Data	E3	1	10	T/505/4009
Data Handling: Extracting and Interpreting Data	E3	1	10	M/505/4008

Credits from equivalent Units:

Please contact the Ascentis office to request equivalences, and ask to speak to a member of the Qualifications Development Team.

### Recommended Prior Knowledge, Attainment and/or Experience

Learners should be able to evidence a level of mathematical skill to at least Entry Level 2 prior to starting to study these qualifications.

### Recommended Guided Learning Hours

The recommended guided learning hours are –

- Entry 3 Award in Mathematical Skills - Developing and Applying Number Skills is 10
- Entry 3 Award in Mathematical Skills - Developing and Applying Addition and Subtraction Skills is 10
- Entry 3 Award in Mathematical Skills - Multiplication of Whole Numbers is 10
- Entry 3 Award in Mathematical Skills - Division of Whole Numbers is 10
- Entry 3 Award in Mathematical Skills - Developing and Applying Fraction Skills is 10
- Entry 3 Award in Mathematical Skills - Developing and Applying Decimal Skills is 10
- Entry 3 Award in Mathematical Skills - Money: Adding and Subtracting is 10
- Entry 3 Award in Mathematical Skills - Time is 10
- Entry 3 Award in Mathematical Skills - Measure: Distance and Length is 10
- Entry 3 Award in Mathematical Skills - Measure: Capacity and Temperature 10
- Entry 3 Award in Mathematical Skills - Developing and Applying Shape and Space Skills is 10
- Entry 3 Award in Mathematical Skills - Data Handling: Recording and Representing Data is 10
- Entry 3 Award in Mathematical Skills - Data Handling: Extracting and Interpreting Data is 10
- Entry 3 Award in Mathematical Skills is 30
- Entry 3 Extended Award in Mathematical Skills is 60
- Entry 3 Certificate in Mathematical Skills is 130

### Total Qualification Time



The total qualification time is –

Entry 3 Award in Mathematical Skills - Developing and Applying Number Skills is 10  
Entry 3 Award in Mathematical Skills - Developing and Applying Addition and Subtraction Skills is 10  
Entry 3 Award in Mathematical Skills - Multiplication of Whole Numbers is 10  
Entry 3 Award in Mathematical Skills - Division of Whole Numbers is 10  
Entry 3 Award in Mathematical Skills - Developing and Applying Fraction Skills is 10  
Entry 3 Award in Mathematical Skills - Developing and Applying Decimal Skills is 10  
Entry 3 Award in Mathematical Skills - Money: Adding and Subtracting is 10  
Entry 3 Award in Mathematical Skills - Time is 10  
Entry 3 Award in Mathematical Skills - Measure: Distance and Length is 10  
Entry 3 Award in Mathematical Skills - Measure: Capacity and Temperature 10  
Entry 3 Award in Mathematical Skills - Developing and Applying Shape and Space Skills is 10  
Entry 3 Award in Mathematical Skills - Data Handling: Recording and Representing Data is 10  
Entry 3 Award in Mathematical Skills - Data Handling: Extracting and Interpreting Data is 10  
Entry 3 Award in Mathematical Skills is 30  
Entry 3 Extended Award in Mathematical Skills is 60  
Entry 3 Certificate in Mathematical Skills is 130

### Age Range of Qualification

These qualifications are suitable for young people aged 14 – 19 and adult learners.

### Opportunities for Progression

These qualifications offer

- The opportunity to move towards Mathematics Functional Skills at Entry 3 or Level 1
- Evidence of achievement for learners moving into the world of work or work-based learning

### Mapping/Relationship to National Occupational Standards

These qualifications are mapped to the Adult Numeracy Core Curriculum. This can be viewed at: <http://www.excellencegateway.org.uk/sflcurriculum>

### Centre Recognition

This qualification can only be offered by centres recognised by Ascentis and approved to run this qualification. Details of the centre recognition and qualification approval process are available from the Ascentis office (tel. 01524 845046) or from the website at [www.ascentis.co.uk](http://www.ascentis.co.uk).

### Qualification Approval

If your centre is already a recognised centre, you will need to complete and submit a qualification approval form to deliver this qualification. Details of the qualification approval process are available from the Ascentis office (tel. 01524 845046) or from the website at [www.ascentis.co.uk](http://www.ascentis.co.uk).

### Registration

All learners **MUST** be registered electronically via the Ascentis electronic registration portal prior to the intended assessment date.

## Status in England, Wales and Northern Ireland

This qualification is available in England, Wales and Northern Ireland. It is only offered in English. If a centre based overseas (including Scotland) would like to offer this qualification, they should make an enquiry to Ascentis.

## Reasonable Adjustments and Special Considerations

In the development of these qualifications Ascentis has made every attempt to ensure that there are no unnecessary barriers to achievement. For learners with particular requirements reasonable adjustments may be made in order that they can have fair assessment and demonstrate attainment. All assessment papers may be enlarged, if required, with the exception of the **Measure: Distance and Length** assessment paper. If enlargement of this paper is required, please contact the Ascentis office prior to the assessment. There are also arrangements for special consideration for any learner suffering illness, injury or indisposition. Full details of the reasonable adjustments and special considerations are available from the Resources/Key Documents area of the Ascentis website [www.ascentis.co.uk](http://www.ascentis.co.uk) or through contacting the Ascentis office.

## Enquiries and Appeals Procedure

Ascentis has an appeals procedure in accordance with the regulatory arrangements in the Ofqual *General Conditions of Recognition*. Full details of this procedure, including how to make an application, are available from the Resources/Key Documents area of the Ascentis website [www.ascentis.co.uk](http://www.ascentis.co.uk) or through contacting the Ascentis office.

## ASSESSMENT ARRANGEMENTS

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### Assessment

Each unit is assessed through an assessment to be taken under supervised conditions. Guide times are provided for each assessment. The assessment is then internally assessed and verified by the centre and then externally verified by Ascentis.

The assessment assesses directly the mathematical skills within the unit and may contain questions that require the learner to apply the skills they have learnt to simple practical situations.

The learner will evidence achievement of all the Assessment Criteria for each unit by completing the Ascentis-designed assessment for that unit. Once a learner has all the evidence for an Award or the Certificate, the assessor is required to complete the Summary Record of Achievement for each learner. The Summary Record of Achievement form is provided in Appendix 1.

Centres are required to retain all evidence from all learners for external verification and for 4 weeks afterwards should any appeal be made. The work should be kept in the centre under secure conditions.

### Ascentis Designed Assessments

Each Entry 3 Award is assessed through an Ascentis designed assessment. This must be conducted in centres under supervised conditions. Learners may re-sit the assessment three times.

These assessments are available to download in the secure examinations section of Ascentis' on-line portal. Once a centre has received qualification approval, access to the assessments will be given to the Examination Officer within the centre. The assessments need to be stored in secure conditions. Three sets of live assessments will be made available.

## VERIFICATION ARRANGEMENTS

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### Internal Verification

Internal verification is the process of ensuring that everyone who assesses a particular unit in a centre is assessing to the same standards i.e. consistently and reliably. Internal verification activities will include: ensuring any stimulus or materials used for the purposes of assessment are fit for purpose; sampling assessments; standardisation of assessment decisions; standardisation of internal verification decisions. Internal Verifiers are also responsible for supporting assessors by providing constructive advice and guidance in relation to the qualification delivered.

Further information is available from the Resources/Key Documents section of the Ascentis website [www.ascentis.co.uk](http://www.ascentis.co.uk)

### External Verification

In order to support the roll-on, roll-off nature of this provision, which is likely to be offered over short time scales, Ascentis will offer a flexible approach to External Verification. This will include verification by post.

Recognised centres will be visited in accordance with a verification model that is considered most appropriate for the provision. More frequent verifications can be requested from the Ascentis Quality Assurance team, for which there is usually an additional charge. External verification will usually focus on the following areas:

- A review of the centres management of the regulated provision
- The levels of resources to support the delivery of the qualification, including both physical resources and staffing
- Ensuring the centre is using appropriate assessment methods and making appropriate assessment decisions according to Ascentis' requirements
- Ensuring the centre has appropriate internal quality assurance arrangements as outlined within the relevant qualification specification
- Checking that the centre is using appropriate administrative arrangements to support the function of delivery and assessment

External Verifiers will usually do this through discussion with the centre management team; assessment and Internal Quality Assurance staff; verifying a sample of learners' evidence; talking to learners, reviewing relevant centre documentation and systems.

### Knowledge, Understanding and Skills required of Assessors and Internal Verifiers

Assessors and those delivering these qualifications should be knowledgeable and competent within the areas of Mathematics and Numeracy in which they are making assessment decisions/delivering these qualifications.

Centres are responsible for ensuring that all staff involved in the delivery of the qualification are appropriately qualified. Ascentis will not be held responsible for any issues that relate to centre staffing which could impact on the successful delivery, assessment and internal quality assurance of our qualifications.

Those delivering the qualification should preferably hold or be working towards a recognised teaching qualification. Assessors must be able to make appropriate assessment decisions. Internal Quality Assurers need to have knowledge and experience of the internal quality assurance processes.

Centres are required to ensure that appropriate training and support is in place for staff involved in the delivery, assessment and internal verification of Ascentis qualifications.

Ascentis offers free support for centres. Further information on the support that is available can be found on Quartz Web or the Ascentis website.

## UNIT SPECIFICATIONS

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### Applying Number Skills

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to recognise numbers up to 1000 and number patterns involving these numbers.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
N1/E3.1, N1/E3.5, N1/E3.7

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
The learner will be able to	The learner can
1 Recognise the written form of whole numbers up to 1000	1.1 Read whole numbers up to 1000 in digit form
	1.2 Read number names of whole numbers up to 1000
	1.3 Record whole numbers up to 1000 in digit form
	1.4 Record number names of whole numbers up to 1000
2 Understand the value of whole numbers up to 1000	2.1 Arrange whole numbers up to 1000 in order of size
	2.2 Identify HTU place value
3 Recognise number patterns involving whole numbers up to 1000	3.1 Count up to 100 in 2s, 5s and 10s
	3.2 Count up to 1000 in 100s
4 Know how to approximate by rounding (to the nearest 10 or 100 for whole numbers up to 1000)	4.1 Round whole numbers up to 1000 to the nearest 10
	4.2 Round whole numbers up to 1000 to the nearest 100
5 Know how to use numbers up to 1000	5.1 Use numbers in two different everyday situations

## UNIT SPECIFICATIONS

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### Applying Addition and Subtraction Skills

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to add and subtract whole numbers. This unit assumes that the learner has prior skills in using numbers at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Number Skills unit at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills in using numbers through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
N1/E3.2, N1/E3.9

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes		Assessment Criteria	
The learner will be able to		The learner can	
1	Use addition involving whole numbers with up to three digits to give totals up to 1000.	1.1	Decide appropriately when to use addition in at least two different practical situations.
		1.2	Present results in context.
2	Use subtraction involving numbers of up to three digits.	2.1	Decide appropriately when to use subtraction in at least two different practical situations.
		2.2	Present results in context.
3	Use a combination of addition and subtraction calculation.	3.1	Decide appropriately when to use addition and subtraction, in combination, in at least two different practical situations.
		3.2	Present results in context.

# UNIT SPECIFICATIONS

## Multiplication of Whole Numbers

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

### Introduction

This unit will give learners an opportunity to multiply whole numbers and check answers. This unit assumes that the learner has prior skills in using numbers at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Number Skills unit at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills in using numbers through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
N1/E3.3, N1/E3.4, N1/E3.5, N1/E3.8, N1/E3.9

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes	Assessment Criteria
The learner will be able to	The learner can
<p>1 Understand how to multiply two digit whole numbers by a single digit.</p>	<p>1.1 Recall multiplication facts (i.e. tables) for 2, 3, 4, 5, and 10.</p> <p>1.2 Identify two digit and three digit multiples of 2, 5, 10, 50, 100.</p> <p>1.3 Multiply two digit whole numbers by a single digit, showing the working out.</p> <p>1.4 Multiply two digit whole numbers by a single digit using a calculator.</p> <p>1.5 Use distributive law (concept not terminology) as a strategy for multiplication, for example, <math>5 \times 34 = (5 \times 30) + (5 \times 4)</math>.</p> <p>1.6 Use different strategies for multiplication, for example, <math>2 \times 26 = (2 \times 25) + (2 \times 1)</math>.</p> <p>1.7 Write down own multiplication calculations using symbols.</p>
<p>2 Know how to multiply two digit whole numbers by a single digit in everyday context.</p>	<p>2.1 Identify the appropriate use of multiplication in different practical situations.</p> <p>2.2 Select and use multiplication appropriately in at least two different practical situation, for example, total number of items in batches.</p> <p>2.3 Present results in context.</p>
<p>3 Check answers as required</p>	<p>3.1 Check answers appropriately using a different method.</p>

## UNIT SPECIFICATIONS

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### Division of Whole Numbers

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to divide whole numbers and check answers. This unit assumes that the learner has prior skills in using numbers at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Number Skills unit at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills in using numbers through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
N1/E3.6

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes	Assessment Criteria
The learner will be able to	The learner can
1 Understand how to divide two digit whole numbers by a single digit.	1.1 Divide two digit numbers by single digits by repeated subtraction. 1.2 Divide two digit whole numbers by single digits by identifying multiples of 2, 3, 4, 5 and 10. 1.3 Divide two digit whole numbers by single digits by identifying multiples of 6, 7, 8 and 9 using multiplication tables/number squares. 1.4 Divide two digit whole numbers by single digits using a calculator. 1.5 Identify that division is not commutative (concept not terminology), for example, $8 \div 4$ is not the same as $4 \div 8$
2 Know how to use division of two digit whole numbers by single digits.	2.1 Select and use division appropriately in everyday context. 2.2 Present results and interpret remainders in context, for example, four cars needed for 18 people with 5 people per car.
3 Know how to check answers as required.	3.1 Check answers using a different method appropriately.



## UNIT SPECIFICATIONS

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### Applying Fraction Skills

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to read, write and understand common fractions. This unit assumes that the learner has prior skills in using numbers at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Number Skills unit at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills in using numbers through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
N2/E3.1, N2/E3.2

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes	Assessment Criteria
The learner will be able to	The learner can
1 Read, write and understand common fractions such as $\frac{3}{4}$ , $\frac{2}{3}$ , $\frac{1}{10}$ .	1.1 Identify and record a unit fraction as one part of the whole when divided into equal parts, with the bottom number (denominator) indicating the number of equal parts, for common fractions such as $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{1}{3}$ , $\frac{1}{10}$ . 1.2 Identify and record a non-unit fraction as several equal parts of a whole, the number of parts indicated by the top number (numerator), for common fractions such as $\frac{8}{4}$ , $\frac{2}{3}$ , $\frac{3}{10}$ . 1.3 Read and record common unit and non-unit fraction names, for example, thirds, quarters, tenths.
2 Recognise and use equivalent fraction forms such as $\frac{5}{10} = \frac{1}{2}$ , $\frac{5}{5} = 1$ .	2.1 Identify equivalent fractions for common fractions such as halves, quarters, fifths, tenths. 2.2 Identify a fraction with the numerator and denominator the same as equivalent to a whole one.
3 Recognise common fractions	3.1 Use common fractions in two different everyday situations

# UNIT SPECIFICATIONS

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## Developing and Applying Decimal Skills

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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### Introduction

This unit will give learners an opportunity to read, write and understand decimals. This unit assumes that the learner has prior skills in using numbers at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Number Skills unit at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills in using numbers through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:  
N2/E3.3

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes		Assessment Criteria	
The learner will be able to		The learner can	
1	Be able to read numbers with up to two decimal places	1.1	Read numbers with up to two decimal places
2	Be able to write numbers with up to two decimal places	2.1	Write numbers with up to two decimal places
3	Understand that the position of a digit signifies its value	3.1	Identify place value in numbers with up to two decimal places
		3.2	Identify that the decimal point separates whole numbers from decimal numbers
		3.3	Identify the use of zero as a place holder
		3.4	Identify the use of a leading zero

## UNIT SPECIFICATIONS

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### Money: Adding and Subtracting

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to add, subtract and use money in decimal notation. This unit assumes that the learner has prior skills in addition, subtraction and decimals at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Addition and Subtraction Skills and the Developing and Applying Decimal Skills units at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills of addition, subtraction and decimals through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
N2/E3.4, MSS1/E3.1, MSS1/E3.2

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
The learner will be able to	The learner can
1 Know how to add and subtract money in decimal notation.	1.1 Add up to three amounts of money in decimal notation showing the working out.
	1.2 Add up to three amounts of money in decimal notation using a calculator.
	1.3 Subtract amounts of money in decimal notation showing the working out.
	1.4 Subtract amounts of money in decimal notation using a calculator.
2 Know how to use money in decimal notation in everyday contexts.	2.1 Read and record prices in decimal notation in two practical situations.
	2.2 Compare prices in decimal notation in two practical situations.
	2.3 Calculate using money in £s and pence in at least two different practical situations.
	2.4 Use appropriate methods to check answers.

## UNIT SPECIFICATIONS

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### Time

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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### Introduction

This unit will give learners an opportunity to read and record time and dates.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
MSS1/E3.3

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
The learner will be able to	The learner can
1 Know how to read and record time in five minute intervals using am and pm.	1.1 Tell the time in five minute intervals on analogue clocks.
	1.2 Tell the time in five minute intervals on 12 hour digital clocks.
	1.3 Tell the time in five minute intervals using am and pm.
	1.4 Record the time in five minute intervals using am and pm.
2 Understand how to record common date formats.	2.1 Recognise day, month and year in common date formats.
	2.2 Read the date on a calendar.
	2.3 Record the date in common formats.
3 Know how to use time in practical situations.	3.1 Use time and date in two different everyday situations.

# UNIT SPECIFICATIONS

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## Measuring and Estimating: Distance and Length

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

### Introduction

This unit will give learners an opportunity to estimate measure and interpret distance. This unit assumes that the learner has prior skills in using numbers at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Number Skills unit at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills in using numbers through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
MSS1/E3.4, MSS1/E3.5, MSS1/E3.8

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes	Assessment Criteria
The learner will be able to	The learner can
1 Know how to read and interpret distance in everyday situations.	1.1 Identify the units for measuring distances. 1.2 Read and record distances on road signs. 1.3 Estimate distance in miles when following and giving directions.
2 Know how to estimate, measure and compare length.	2.1 Read and record lengths in decimal notation using metric measurements. 2.2 Recognise that 100cm = 1m. 2.3 Recognise that 10mm = 1cm. 2.4 Recognise that 1000mm = 1m 2.5 Recognise that 50cm = 0.5m (using zero as a place holder). 2.6 Order lengths in decimal notation (with up to 2 decimal places). 2.7 Select appropriate units of length to measure in everyday situations. 2.8 Estimate lengths to a reasonable degree of accuracy in everyday situations. 2.9 Select appropriate instruments to measure items in practical situations. 2.10 Measure items using labelled and unlabelled divisions on measuring instruments and record measurements in decimal notation.

## UNIT SPECIFICATIONS

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### Measure: Capacity and Temperature

Credit Value of Unit 1

GLH of Unit 10

Level of Unit E3

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#### Introduction

This unit will give learners an opportunity to measure capacity and temperature. This unit assumes that the learner has prior skills in using numbers and decimals at Entry 3. These skills may have been gained through the achievement of the Ascentis Developing and Applying Number Skills and the Developing and Applying Decimal Skills units at Entry 3 or equivalent units. Alternatively the learner may be asked to demonstrate the skills in using numbers and decimals through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
MSS1/E3.7, MSS1/E3.9

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes	Assessment Criteria
The learner will be able to	The learner can
1 Know how to estimate, measure and compare capacity.	1.1 Read and record capacity in decimal notation using metric measurements.
	1.2 Identify that 1000ml = 1 litre.
	1.3 Select appropriate units of capacity for everyday items.
	1.4 Match familiar items.
	1.5 Estimate the capacity of containers.
	1.6 Measure the capacity of containers by filling them using containers of known capacity.
	1.7 Measure the capacity of containers by reading labelled divisions on a measuring jug.
	1.8 Compare estimated and actual capacities of containers.
2 Know how to read and measure temperature.	2.1 Read a thermometer.
	2.2 Identify that temperature can be measured in different scales.

## UNIT SPECIFICATIONS

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### Applying Shape and Space Skills

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to identify and use the properties of 2D and 3D shapes.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
MSS2/E3.1

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes	Assessment Criteria
The learner will be able to	The learner can
1 Identify and use the properties of 2D and 3D shapes to solve practical problems using appropriate vocabulary.	1.1 Use appropriate vocabulary related to shape, for example, side, length, angle, line of symmetry.
	1.2 Identify right angles on everyday items.
	1.3 Sort 2D and 3D items into those with and without right angles.
	1.4 Find lines of symmetry of paper cut outs of regular shapes by folding.
	1.5 Identify and sketch lines of symmetry in shapes and images.
	1.6 Sort 2D shapes according to the number of sides, number of angles, number of equal sides, number of equal angles, number of lines of symmetry.
	1.7 Identify which 2D shapes fit together without leaving gaps.
	1.8 Investigate ways of stacking 3D shapes of the same size, for example, cans on a shop shelf, items in packing cases or delivery vans.

## UNIT SPECIFICATIONS

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### Data Handling: Recording and Representing Data

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to understand how to observe, record and represent information.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:  
HD1/E3.3, HD1/E3.4

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
The learner will be able to	The learner can
1 Know how to observe and record numerical information.	1.1 Identify appropriate categories for different collections of data, for example, number of people in a household, month of birthday, favourite football team or pop group, traffic survey.
	1.2 Collect data in a tally chart.
	1.3 Translate the tally into a frequency table by totalling the tallies.
2 Know how to organise and represent information.	2.1 Display data collected in a suitable table, bar chart or pictogram, with appropriate labelling.
	2.2 Display given data sets in different ways appropriately, for example, table, bar chart, pictogram, spreadsheet.



## UNIT SPECIFICATIONS

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### Data Handling: Extracting and Interpreting Data

**Credit Value of Unit 1**

**GLH of Unit 10**

**Level of Unit E3**

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#### Introduction

This unit will give learners an opportunity to extract and interpret information from data.

This unit maps to the Adult Numeracy Core Curriculum in the following areas  
HD1/E3.1, HD1/E3.2

Assessment will be through the completion of an assessment which will be carried out under supervised conditions.

Learning Outcomes		Assessment Criteria	
The learner will be able to		The learner can	
1	Know how to extract and interpret information.	1.1	Extract and interpret information from lists, tables, diagrams and simple charts.
2	Know how to make numerical comparisons from bar charts and pictograms.	2.1	Identify categories on a bar chart or pictogram.
		2.2	Use a bar chart or pictogram to read the frequencies of categories.
		2.3	Make comparisons between categories using a bar chart or pictogram.

## APPENDIX 1

### Summary Record of Achievement

#### Entry 3 Award/Extend Award/Certificate in Mathematical Skills

Learner Name \_\_\_\_\_

Unit Title	Level	Credit Value	Date completed	Assessor Signature	Internal Verifier Signature (if sampled)
Applying Number Skills	Entry 3	1			
Applying Addition and Subtraction Skills	Entry 3	1			
Multiplication of Whole Numbers	Entry 3	1			
Division of Whole Numbers	Entry 3	1			
Applying Fraction Skills	Entry 3	1			
Developing and Applying Decimal Skills	Entry 3	1			
Money: Adding and Subtracting	Entry 3	1			
Time	Entry 3	1			
Measuring and Estimating: Distance and Length	Entry 3	1			
Measure: Capacity and Temperature	Entry 3	1			
Applying Shape and Space Skills	Entry 3	1			
Data Handling: Recording and Representing Data	Entry 3	1			
Data Handling: Extracting and Interpreting Data	Entry 3	1			

Minimum Credit Value of Qualification \_\_\_\_\_

Assessor Signature \_\_\_\_\_

Internal Verifier Signature (if sampled) \_\_\_\_\_

## APPENDIX 2

### Functional Skills Opportunities

Learners following a course based on this specification can be offered opportunities to develop and generate evidence of achievement in aspects of the following Functional Skill. Examples of such opportunities are given below.

#### Mathematics

##### Entry 3

Skill Standards	Coverage and range (indicative)
<p><b>Representing</b></p> <ul style="list-style-type: none"> <li>▪ Understand practical problems in familiar contexts and situations</li> <li>▪ Begin to develop own strategies for solving simple problems</li> <li>▪ Select mathematics to obtain answers to simple given practical problems that are clear and routine.</li> </ul> <p><b>Assessment weighting 30 - 40%</b></p>	<ul style="list-style-type: none"> <li>▪ Add and subtract using three-digit numbers</li> <li>▪ Solve practical problems involving multiplication and division by 2, 3, 4, 5 and 10</li> <li>▪ Round to the nearest 10 or 100</li> <li>▪ Understand and use simple fractions</li> <li>▪ Understand, estimate, measure and compare length, capacity, weight and temperature</li> <li>▪ Understand decimals to two decimal places in practical contexts</li> <li>▪ Recognise and describe number patterns</li> <li>▪ Complete simple calculations involving money and measures</li> <li>▪ Recognise and name simple 2D and 3D shapes and their properties</li> <li>▪ Use metric units in everyday situations</li> <li>▪ Extract, use and compare information from lists, tables, simple charts and simple graphs.</li> </ul>
<p><b>Analysing</b></p> <ul style="list-style-type: none"> <li>▪ Apply mathematics to obtain answers to simple given practical problems that are clear and routine</li> <li>▪ Use simple checking procedures.</li> </ul> <p><b>Assessment weighting 30 - 40%</b></p>	
<p><b>Interpreting</b></p> <ul style="list-style-type: none"> <li>▪ Interpret and communicate solutions to practical problems in familiar contexts and situations.</li> </ul> <p><b>Assessment weighting 30 - 40%</b></p>	
<p><b>Examples:</b></p>	
<ul style="list-style-type: none"> <li>▪ <b>Each individual unit offers the opportunity to develop the under pinning knowledge for at least one of the coverage and range statements above</b></li> </ul>	

### **Spiritual, Moral, Ethical, Social, Legislative, Economic and Cultural Issues**

These qualifications offer opportunities for learners to develop an understanding of spiritual, moral, ethical, social and cultural issues. For example:

- Gathering numerical information on “hot” topics within the media, and using the information to help inform opinions;
- Gathering information about dates and frequency of religious events and activities within the locality;
- Gathering information about clubs and societies in the areas to include dates, frequency, costs. Numerical information about local schools e.g. roll number, number of admissions, age range etc. to help inform choice

### **Sustainable Development and Environmental Issues, Health and Safety considerations and European Developments consistent with international agreements**

These qualifications offer opportunities for learners to develop an understanding of sustainable development, environmental issues, health and safety and European developments consistent with international agreements. For example, gathering or presenting information, including numerical information on an environmental issue of relevance to the community in which the learners are located.

### **Health and Safety**

A centre must have completed a full risk assessment of all areas of activity and identified potential risks. Where a risk exists, all practicable actions must be taken to eliminate or reduce this risk so that it is as low as possible