



Ascentis Level 2 Award in Mathematical Skills - Data Calculations

Ascentis Level 2 Certificate in Mathematical Skills Specification

.

Operational Start Date	15/09/2025
Operational End Date	31/07/2026
Certification End Date	31/07/2027

ABOUT ASCENTIS

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, England), Council for the Curriculum, Examinations and Assessment (CCEA, Northern Ireland) and Qualifications Wales

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

Ascentis House
Lancaster Business Park
3 Mannin Way
Lancaster
LA1 3SW

Tel 01524 845046
www.ascentis.co.uk

Company limited by guarantee. Registered in England and Wales No. 6799564. Registered Charity No. 1129180

TABLE OF CONTENTS

MATHEMATICAL SKILLS

Introduction	4
Aims	4
Target Group	4
Regulation Codes	4
Rationale for Rules of Combination	5
Rules of Combination	5
Recommended Prior Knowledge, Attainment and / or Experience	5
Guided Learning Hours (GLH)	5
Total Qualification Time (TQT)	6
Age Range of Qualification	6
Opportunities for Progression	6
Centre Recognition	6
Qualification Approval	6
Registration	6
Status in England, Wales and Northern Ireland	6
Reasonable Adjustments and Special Considerations	7
Enquiries and Appeals Procedure	7

ASSESSMENT ARRANGEMENTS

Assessment	8
Ascentis Designed Assessments	8
The Use of Artificial Intelligence (AI) in Assessments	8

VERIFICATION ARRANGEMENTS

Internal Verification	9
External Verification	9
Knowledge, Understanding and Skills Required of Assessors and Internal Verifiers	9

UNIT SPECIFICATIONS

Understanding Numbers and Formulae	11
Understanding and Using Fractions, Ratio and Proportion	12
Understanding and Using Decimals	13
Understanding and Using Percentages	14
Understanding Money, Time and Temperature	15
Understanding Length, Weight and Capacity	16
Understanding Shape and Space	17
Handling Data	18
Data Calculations	19
Probability	20
Appendix 1: Summary Record of Achievement	21

ASCENTIS LEVEL 2 MATHEMATICAL SKILLS

Introduction

The Ascentis Level 2 Award in Mathematical Skills Data Calculations and the Level 2 Certificate in Mathematical Skills are ideal qualifications for adults and young people wishing to develop their mathematical skills at Level 2. They are intended to aid progression to further study. The units 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:

- Relatively short qualifications of either 10 or 20 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 these qualifications are to enable learners:

- 1 To gain underpinning mathematical skills
- 2 To bridge the gap in their mathematical knowledge
- 3 To progress onto further qualifications
- 4 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.

Regulation Codes

Ascentis Level 2 Award in Mathematical Skills – Data Calculations: 610/6397/6

Ascentis Level 2 Certificate in Mathematical Skills: 610/6393/9

Rationale for the Rules of Combination

Learners **must** complete the one unit for the Award at Level 2. This is a single unit qualification and certification is given for achieving a pass in the Ascentis designed assessment.

Learners must complete a minimum of 13 credits to achieve the Certificate.

Rules of Combination

Ascentis Level 2 Award in Mathematical Skills – Data Calculations				
Title	Level	Credit Value	GLH	Unit Reference
Data Calculations	2	1	10	Y/505/2348

Ascentis Level 2 Certificate in Mathematical Skills				
				Credits: 13
Title	Level	Credit Value	GLH	Unit Reference
Understanding Numbers and Formulae	2	1	10	Y/505/2270
Understanding and Using Fractions, Ratios and Proportion	2	2	20	F/505/2280
Understanding and Using Decimals	2	1	10	J/505/2314
Understanding and Using Percentages	2	2	20	L/505/2332
Understanding Money, Time and Temperature	2	1	10	H/505/2336
Understanding Length, Weight and Capacity	2	1	10	T/505/2339
Understanding Shape and Space	2	2	20	F/505/2344
Handling Data	2	2	20	R/505/2347
Data Calculations	2	1	10	Y/505/2348
Probability	2	1	10	D/505/2352
Credits from equivalent Units: Please contact the Ascentis office to request equivalences and ask to speak to a member of the Qualifications Development Team.				

Unit certification is available

Recommended Prior Knowledge, Attainment and/or Experience

Learners should be able to evidence a level of mathematical skill to at least Level 1 prior to studying these qualifications.

Guided Learning Hours (GLH)

The recommended guided learning hours are –

- Ascentis Level 2 Award in Mathematical Skills – Data Calculations - 10
- Ascentis Level 2 Certificate in Mathematical Skills - 130

Total Qualification Time (TQT)

The total qualification time is –

- Ascentis Level 2 Award in Mathematical Skills – Data Calculations - 10
- Ascentis Level 2 Certificate in Mathematical Skills - 130

Age Range of Qualification

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

Opportunities for Progression

These qualifications offer:

- Evidence of achievement for learners moving into the world of work or work-based learning.
- Precursory achievement to establish progression onto further Mathematics qualifications such as Essential Skills qualifications or GCSEs.

Mapping/Relationship to National Occupational Standards

This qualification is mapped to the Adult Numeracy Core Curriculum (Basic Skills Agency 2001)

Centre Recognition

These qualifications 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.

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.

Once approved, Ascentis will deliver subject specific training free of charge to support you with the delivery, assessment and internal quality assurance processes for this qualification. This training is mandatory due to the qualifications using externally set assessments, and all relevant centre staff must be fully aware of the requirements. This training must take place before your centre undertakes any assessments. You may start delivery of the content of the course in the meantime. All staff involved in the delivery, assessment and IQA of the qualifications (and those that have been listed on the centre recognition / qualification approval form) must be present at the training. If this is not possible, it is the centre's responsibility to ensure that the training is disseminated to those who cannot be present. Your EQA will contact you to arrange a mutually convenient date for this training.

Registration

All learners must normally be registered with Ascentis within seven weeks of commencement of a course via the Ascentis electronic registration portal. Late registration may result in a fee, please refer to the latest version of the Ascentis Product Catalogue.

Status in England, Wales and Northern Ireland

This qualification is only available in Northern Ireland. They are only offered in English. If a centre based overseas (including Scotland) would like to offer these qualifications, 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 candidates with particular requirements reasonable adjustments may be made in order that candidates can have fair assessment and demonstrate attainment. All assessment papers may be enlarged, if required, with the exception of the **Understanding Length, Weight and Capacity** 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 reasonable adjustments and special considerations are available from the login area of the Ascentis website 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 CCEA *General Conditions of Recognition*. Full details of this procedure, including how to make an application, are available from the login area of the Ascentis website www.ascentis.co.uk or through contacting the Ascentis office.

Useful Links

Web links and other resources featured in this specification are suggestions only to support the delivery of this qualification and should be implemented at the centre's discretion. The hyperlinks provided were live at the time this specification was last reviewed. Please kindly notify Ascentis if you find a link that is no longer active.

Please note: Ascentis is not responsible for the content of third-party websites and, whilst we check external links regularly, the owners of these sites may remove or amend these documents or web pages at any time.

ASSESSMENT ARRANGEMENTS

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 Level 2 unit is assessed through an Ascentis designed assessment. This must be conducted in centres under supervised conditions.

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 per academic year. If a learner does not achieve a pass on their first attempt, two opportunities to re-sit the assessment are available. Further teaching and learning must take place prior to a resit being taken.

The Use of Artificial Intelligence (AI) in Assessments

There are potential risks associated with the use of AI in assessments, such as the possibility of bias and the potential for cheating.

Centres are expected to detect and monitor the use of AI tools in assessments. Centres must be satisfied that the work provided is that of the learner. All learners must be aware that they are responsible for ensuring they are not cheating in assessments by using AI tools. All learners must cite the use of AI in their assessments where this is allowed.

VERIFICATION ARRANGEMENTS

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; and 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.

Ascentis offer free refresher training in support of this role through an Ascentis Internal Quality Assurance course. The purpose of the course is to provide staff in centres with knowledge and understanding of Ascentis IQA processes and procedures, which will enable them to carry out their role more effectively. To book your place on a course or request further information, please contact the Ascentis Quality Assurance Team (qualityassurance@ascentis.co.uk).

Further information is available from the login section of the Ascentis website 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 verified 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:

- 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 Quality Assurers will usually do this through discussion with the 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 the Ascentis electronic portal or the Ascentis website.

UNIT SPECIFICATIONS

Understanding Numbers and Formulae

Credit Value of Unit 1

GLH of Unit 10

Level of Unit 2

Introduction

This unit will give learners an opportunity to compare and carry out calculations which involve both positive and negative numbers of any size as well as evaluating formulae.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:

N1/L2.1, N1/L2.2, N2/L2.4

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 positive and negative numbers of any size	1.1	Read positive numbers of any size in digit form
		1.2	Read negative numbers of a size in digit form
2	Be able to write positive and negative numbers of any size	2.1	Write positive numbers of any size in digit form
		2.2	Write negative numbers of any size in digit form
3	Be able to order and compare positive and negative numbers of any size in practical context	3.1	Order positive and negative numbers in order of size
		3.2	Compare positive and negative numbers of any size
4	Be able to carry our calculations with numbers of any size using efficient methods	4.1	Carry out multi-step calculations in an everyday situation
		4.2	Check calculations using calculator
		4.3	Use a calculator efficiently to add, subtract, multiply, and divide
5	Be able to evaluate expressions and make substitutions in given formulae in words and symbols to produce results	5.1	Carry out calculations in the correct order (BODMAS)
		5.2	Match expressions in words and symbols
		5.3	Multiply when there is no operator between a number and one or more variable
		5.4	Evaluate simple formulae using brackets
		5.5	Evaluate simple expressions by using substitution

UNIT SPECIFICATIONS

Understanding and Using Fractions, Ratios and Proportion

Credit Value of Unit 2

GLH of Unit 20

Level of Unit 2

Introduction

This unit will give learners an opportunity to convert between fractions, decimals and percentages as well as being able to calculate ratio and direct proportion. This unit assumes that the learner has prior skills in using numbers at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding Numbers and Formulae unit at Level 2 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/L2.3, N2/L2.1, N2/L2.2, N2/L2.3, N2/L2.4, N2/L2.10

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 use fractions to order and compare amounts or quantities	1.1	Reduce a fraction to its simplest form
		1.2	Order fractions with the same denominators
		1.3	Order fractions with different denominators
		1.4	Use fractions to compare amounts or quantities
2	Be able to identify equivalences between fractions, decimals and percentages	2.1	Convert a given fraction to a decimal and a percentage
		2.2	Convert a given decimal to a fraction and a decimal
		2.3	Convert a given percentage to a fraction and a decimal
		2.4	Arrange fractions, decimals and percentages in order of size
3	Be able to evaluate one number as a fraction of another	3.1	Calculate a number as a fraction of another, giving the answer in its simplest form
4	Be able to find a fraction of an amount or quantity	4.1	Find a fraction of an amount or quantity
5	Be able to use fractions to add or subtract amounts or quantities	5.1	Use fractions to add or subtract a range of amounts or quantities
		5.2	Use a calculator to add or subtract fractions efficiently
		5.3	Use a calculator to check fraction calculations
6	Be able to calculate ratio and direct proportion	6.1	Calculate quantities using ratio in the form of a:b or a:b:c
		6.2	Perform calculations using direct proportion in an everyday situation

UNIT SPECIFICATIONS

Understanding and Using Decimals

Credit Value of Unit 1

GLH of Unit 10

Level of Unit 2

Introduction

This unit will give learners an opportunity to compare and perform calculations with decimals. This unit assumes that the learner has prior skills in using numbers at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding Numbers and Formulae unit at Level 2 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/L2.5, N2/L2.6

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 Be able to approximate decimals by rounding	1.1 Round numbers with three decimal places to two decimal places
	1.2 Round numbers with two decimal places to one decimal place
	1.3 Round numbers with one decimal place to a whole number
	1.4 Round answers from a calculator to an appropriate degree of accuracy
2 Be able to order and compare decimals	2.1 Order decimals up to three decimal places
	2.2 Compare decimals up to three decimal places
3 Be able to add decimals up to three decimal places in an everyday situation	3.1 Add decimals using efficient written methods
	3.2 Add decimals using efficient calculator methods
4 Be able to subtract decimals up to three decimal places in an everyday situation	4.1 Subtract decimals using efficient written methods
	4.2 Subtract decimals using efficient calculator methods
5 Be able to multiply decimals up to three decimal places in an everyday situation	5.1 Multiply decimals by numbers of any value using efficient written methods
	5.2 Multiply decimals by numbers of any value using efficient calculator methods
6 Be able to divide decimals up to three decimal places in an everyday situation	6.1 Divide decimals by numbers of any value using efficient written methods
	6.2 Divide decimals by numbers of any value using efficient calculator methods

UNIT SPECIFICATIONS

Understanding and Using Percentages

Credit Value of Unit 2

GLH of Unit 20

Level of Unit 2

Introduction

This unit will give learners an opportunity to compare and calculate with percentages. This unit assumes that the learner has prior skills in using fractions and decimals at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding Fractions, Ratios and Proportion and the Understanding and Using Decimals units at Level 2 or equivalent units. Alternatively, the learner may be asked to demonstrate the skills in using fractions and decimals through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:
N2/L2.7, N2/L2.8, N2/L2.9, N2/L2.10

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 order and compare percentages	1.1	Order percentage
		1.2	Compare percentages
2	Be able to calculate percentage increase	2.1	Calculate a percentage increase
3	Be able to calculate percentage decrease	3.1	Calculate a percentage decrease
4	Be able to find percentage parts of quantities and measurements	4.1	Calculate percentage parts of quantities and measurements using efficient written methods
		4.2	Calculate percentage parts of quantities and measurements using a calculator
		4.3	Calculate percentage parts of quantities and measurements using an alternative method
5	Be able to evaluate one number as a percentage of another	5.1	Calculate one number as a percentage of another by changing a fraction to a percentage

UNIT SPECIFICATIONS

Understanding Money, Time and Temperature

Credit Value of Unit 1

GLH of Unit 10

Level of Unit 2

Introduction

This unit will give learners an opportunity to perform calculations involving sums of money in addition to recording time and temperature. This unit assumes that the learner has prior skills in using decimals at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding and Using Decimals unit at Level 2 or equivalent units. Alternatively, the learner may be asked to demonstrate the skills in using decimals through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:
MSS1/L2.1, MSS1/L2.2, MSS1/L2.4, MSS1/L2.5, MSS1/L2.6

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	Be able to calculate with sums of money and convert between currencies	1.1	Perform a range of calculations using sums of money
		1.2	Perform a range of calculations to convert from sterling to different currencies
		1.3	Perform a range of calculations to convert to sterling from different currencies
2	Be able to calculate, measure and record time in different formats	2.1	Describe the different units for measuring time
		2.2	Convert between units of time
		2.3	Calculate durations of time using 12hr and 24hr clock times
		2.4	Calculate durations of time using a calendar
		2.5	Record durations of time, in different formats
3	Be able to calculate, measure and record temperature	3.1	Measure and record temperature using appropriate units to an appropriate degree of accuracy
		3.2	Carry out calculations involving units within the same measurement system in an everyday situation
		3.3	Carry out calculations involving units in different measurement systems using conversion tables and scales

UNIT SPECIFICATIONS

Understanding Length, Weight and Capacity

Credit Value of Unit 1

GLH of Unit 10

Level of Unit 2

Introduction

This unit will give learners an opportunity to estimate, measure and compare length, weight and capacity using both metric and imperial units. This unit assumes that the learner has prior skills in using decimals at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding and Using Decimals unit at Level 2 or equivalent units. Alternatively, the learner may be asked to demonstrate the skills in using decimals through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:
MSS1/L2.3, MSS1/L2.5, MSS1/L2.6

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 Be able to estimate, measure and compare length using metric and imperial units	1.1 Measure and compare length using metric units to an appropriate degree of accuracy 1.2 Carry out calculations involving units within the same measurement system 1.3 Carry out calculations involving units in different measurement systems using conversions tables and scales 1.4 Approximate conversion factors in an everyday situation
2 Be able to estimate, measure and compare weight using metric and imperial units	2.1 Measure and compare weight using metric units to an appropriate degree of accuracy 2.2 Carry out calculations involving units within the same measurement system 2.3 Carry out calculations involving units in different measurement systems using conversion tables and scales 2.4 Approximate conversion factors in an everyday situation
3 Be able to estimate, measure and compare capacity using metric and imperial units	3.1 Measure and compare capacity using metric units to an appropriate degree of accuracy 3.2 Carry out calculations involving units within the same measurement system 3.3 Carry out calculations involving units in different measurement systems using conversion tables and scales 3.4 Approximate conversion factors in an everyday situation

UNIT SPECIFICATIONS

Understanding Shape and Space

Credit Value of Unit 2

GLH of Unit 20

Level of Unit 2

Introduction

This unit will give learners an opportunity to calculate perimeters, areas and volumes of shapes and use scale drawings. This unit assumes that the learner has prior skills in using formulae at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding Numbers and Formulae unit at Level 2 or equivalent units. Alternatively, the learner may be asked to demonstrate the skills in using formulae through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:
MSS1/L2.7, MSS1/L2.8, MSS1/L2.9, MSS1/L2.10, MSS2/L2.1, MSS2/L2.2

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	Be able to understand and use given formulae for finding perimeters of shapes	1.1	Calculate perimeters of regular shapes using given formulae
2	Be able to understand and use given formulae for finding areas of shapes	2.1	Calculate areas of regular shapes using given formulae
		2.2	Calculate areas of composite shapes using given formulae
3	Be able to understand and use given formulae for finding volumes of shapes	3.1	Calculate volumes of regular shapes using given formulae
4	Be able to work out dimensions from scale drawings	4.1	Calculate measurements from plans and scale drawings using different scales
5	Be able to recognise and use common 2D representations of 3D shapes	5.1	Use 2D representations of 3D objects in maps or plans
6	Be able to solve problems involving 2D shapes and parallel lines	6.1	Identify parallel lines on common 2D shapes
		6.2	Use the properties of parallel lines to solve problems in an everyday situation

UNIT SPECIFICATIONS

Handling Data

Credit Value of Unit 2

GLH of Unit 20

Level of Unit 2

Introduction

This unit will give learners an opportunity to extract, interpret, organise and represent data using charts and graphs.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:

HD1/L2.1, HD1/L2.2

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 Be able to extract and interpret discrete and continuous data from everyday situations	1.1 Define discrete data
	1.2 Define continuous data
	1.3 Extract discrete and/or continuous data from <ul style="list-style-type: none"> ▪ Tables ▪ Diagrams ▪ Charts ▪ Line graphs
	1.4 Interpret discrete and/or continuous data from <ul style="list-style-type: none"> ▪ Tables ▪ Diagrams ▪ Charts ▪ Line graphs
2 Be able to organise and represent discrete data	2.1 Organise discrete data for representation
	2.2 Construct complex table
	2.3 Construct pie charts
	2.4 Construct composite bar charts
	2.5 Describe the effects of using different scales in representations
3 Be able to organise and represent continuous data	3.1 Represent continuous data in a line graph
	3.2 Identify trends from an analysis of the slope of the line

UNIT SPECIFICATIONS

Data Calculations

Credit Value of Unit 1

GLH of Unit 10

Level of Unit 2

Introduction

This unit will give learners an opportunity to calculate the measures of spread for sets of data. This unit assumes that the learner has prior skills in using numbers at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding Numbers and Formulae unit at Level 2 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:
HD1/L2.3, HD1/L2.4

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 find the mean, median and mode, and use them as appropriate to compare two sets of data	1.1 Find the mean for sets of data
	1.2 Find the median for sets of data
	1.3 Find the mode for sets of data
	1.4 Compare the mean, median and mode for different sets of data
	1.5 State the different purposes for which the mean, median and mode can be used in an everyday situation
2 Be able to find the range and use it to describe the spread within sets of data	2.1 Calculate the range of sets of data
	2.2 Compare the ranges of sets of data

UNIT SPECIFICATIONS

Probability

Credit Value of Unit 1

GLH of Unit 10

Level of Unit 2

Introduction

This unit will give learners an opportunity to understand probability and use tree diagrams. This unit assumes that the learner has prior skills in using fractions and decimals at Level 2. These skills may have been gained through the achievement of the Ascentis Understanding Fractions, Ratios and Proportion and the Understanding and Using Decimals units at Level 2 or equivalent units. Alternatively, the learner may be asked to demonstrate the skills in using fractions and decimals through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas:
HD2/L2.1

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 Be able to identify the range of possible outcomes of combined events and record the information using tables	1.1 Record the possible outcomes of combined events in tables in an everyday situation 1.2 Calculate the probability of combined events in tables
2 Be able to identify the range of possible outcomes of combined events and record the information using diagrams	2.1 Record the possible outcomes of combined events in tree diagrams in an everyday situation 2.2 Calculate the probability of combined events in tree diagrams

APPENDIX 1

Summary Record of Achievement

Ascentis Level 2 Award in Data Calculations/Certificate in Mathematical Skills

Learner Name _____

Unit Title	Level	Credit Value	Date completed	Assessor Signature	Internal Verifier Signature (if sampled)
Understanding Numbers and Formulae	2	1			
Understanding and Using Fractions, Ratios and Proportion	2	2			
Understanding and Using Decimals	2	1			
Understanding and Using Percentages	2	2			
Understanding Money, Time and Temperature	2	1			
Understanding Length, Weight and Capacity	2	1			
Understanding Shape and Space	2	2			
Handling Data	2	2			
Data Calculations	2	1			
Probability	2	1			

Minimum Credit Value of Qualification _____

I confirm that the minimum number of credits at the appropriate level have been achieved in order for a claim for certification to be made. I can confirm that the credit has been achieved from the correct combination of mandatory and optional units as specified within the Rules of Combination.

Assessor Signature _____

Internal Verifier Signature (if sampled) _____