



Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills)

Ascentis Level 1 Extended Award in Mathematics (Stepping Stones to Functional Skills)

- Understanding Numbers
- Using Calculations: Addition and Subtraction of Whole Numbers
- Using Calculations: Multiplication and Division of Whole Numbers
- Understanding and Using Fractions
- Understanding and Using Decimals
- Understanding and Using Percentages
- Measure: Time
- Understanding Length, Weight and Capacity
- Understanding Perimeter and Area
- Understanding Volume
- Understanding and Using 2D Shapes
- Handling Data
- Data Calculations
- Probability

Ascentis Level 1 Certificate in Mathematics (Stepping Stones to Functional Skills)

Ofqual Number (See page 4 of the specification)

Ofqual Start Date	01/08/2019
Ofqual Review Date	31/07/2028
Ofqual Certification Review Date	31/07/2029

SUMMARY OF CHANGES

Version and Date	Change Detail	Section
August 2026 V2	Updates to Assessment Criteria wording across all units following review. Indicative content added for all units	Unit Specifications

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

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ASCENTIS LEVEL 1 AWARDS IN MATHEMATICS (STEPPING STONES TO FUNCTIONAL SKILLS)

Introduction

The Ascentis Level 1 Awards in Mathematics (Stepping Stones to Functional Skills) and the Level 1 Certificate in Mathematics (Stepping Stones to Functional Skills) are ideal qualifications for adults and young people wishing to develop their mathematical skills at Level 1. They are intended to aid progression, either to further study through Mathematics Functional Skills or GCSE Mathematics qualifications. The Ascentis Level 1 Awards in Mathematics (Stepping Stones to Functional Skills) are a range of small qualifications which have been designed to 'bridge the gaps' 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 – 14 in total
- Unit certification is available for each of the units
- 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 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 Level 1 or GCSE Mathematics
- 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

Ofqual Qualification Numbers:

- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Numbers: 603/4733/8
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Addition and Subtraction of Whole Numbers: 603/4734/X
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Multiplication and Division of Whole Numbers: 603/4735/1
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Fractions: 603/4736/3
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Decimals: 603/4737/5
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Percentages: 603/4738/7
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Measure: Time: 603/4739/9
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Length, Weight and Capacity: 603/4740/5

- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Perimeter and Area: 603/4741/7
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Volume: 603/4742/9
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using 2D Shapes: 603/4743/0
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- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Data Calculations: 603/4745/4
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Probability: 603/4746/6
- Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills): 603/4747/8
- Ascentis Level 1 Extended Award in Mathematics (Stepping Stones to Functional Skills): 603/4748/X
- Ascentis Level 1 Certificate in Mathematics (Stepping Stones to Functional Skills): 603/4749/1

Rationale for the Rules of Combination

Learners **must** complete one unit for each Award at Level 1. These are single unit qualifications and certification is given for achieving a pass in the Ascentis designed assessment.

Learners who achieve a minimum of 13 credits using any combination of the Level 1 Awards may wish to claim a Level 1 Certificate in Mathematics (Stepping Stones to Functional Skills)

Rules of Combination

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Numbers				
Title	Level	Credit Value	GLH	Unit Reference
Understanding Numbers	1	2	20	R/503/3166

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Addition and Subtraction of Whole Numbers				
Title	Level	Credit Value	GLH	Unit Reference
Using Calculations: Addition and Subtraction of Whole Numbers	1	1	10	J/503/3259

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Multiplication and Division of Whole Numbers				
Title	Level	Credit Value	GLH	Unit Reference
Using Calculations: Multiplication and Division of Whole Numbers	1	2	20	R/617/6581

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Fractions				
Title	Level	Credit Value	GLH	Unit Reference
Understanding and Using Fractions	1	2	20	Y/503/3170

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Decimals				
Title	Level	Credit Value	GLH	Unit Reference
Understanding and Using Decimals	1	2	18	R/503/3278

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Percentages				
Title	Level	Credit Value	GLH	Unit Reference
Understanding and Using Percentages	1	2	20	D/503/3252

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Measure: Time				
Title	Level	Credit Value	GLH	Unit Reference
Measure: Time	1	2	20	Y/617/6582

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Length, Weight and Capacity				
Title	Level	Credit Value	GLH	Unit Reference
Understanding Length, Weight and Capacity	1	1	10	D/617/6583

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Perimeter and Area				
Title	Level	Credit Value	GLH	Unit Reference
Understanding Perimeter and Area	1	1	10	J/503/3276

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Volume				
Title	Level	Credit Value	GLH	Unit Reference
Understanding Volume	1	1	10	H/617/6584

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using 2D Shapes				
Title	Level	Credit Value	GLH	Unit Reference
Understanding and Using 2D Shapes	1	1	10	K/617/6585

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Handling Data				
Title	Level	Credit Value	GLH	Unit Reference
Handling Data	1	2	20	M/617/6586

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Data Calculations				
Title	Level	Credit Value	GLH	Unit Reference
Data Calculations	1	1	10	K/503/3044

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Probability				
Title	Level	Credit Value	GLH	Unit Reference
Probability	1	1	10	Y/503/3282

Ascentis Level 1 Award in Mathematics (Stepping Stones to Functional Skills)

Minimum credits: 3
Maximum credits: 5

Title	Level	Credit Value	GLH	Unit Reference
Understanding Numbers	1	2	20	R/503/3166
Using Calculations: Addition and Subtraction of Whole Numbers	1	1	10	J/503/3259
Using Calculations: Multiplication and Division of Whole Numbers	1	2	20	R/617/6581
Understanding and Using Fractions	1	2	20	Y/503/3170
Understanding and Using Decimals	1	2	18	R/503/3278
Understanding and Using Percentages	1	2	20	D/503/3252
Measure: Time	1	2	20	Y/617/6582
Understanding Length, Weight and Capacity	1	1	10	D/617/6583
Understanding Perimeter and Area	1	1	10	J/503/3276
Understanding Volume	1	1	10	H/617/6584
Understanding and Using 2D Shapes	1	1	10	K/617/6585
Handling Data	1	2	20	M/617/6586
Data Calculations	1	1	10	K/503/3044
Probability	1	1	10	Y/503/3282

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 Level 1 Extended Award in Mathematics (Stepping Stones to Functional Skills)

Minimum credits: 6
Maximum credits: 12

Title	Level	Credit Value	GLH	Unit Reference
Understanding Numbers	1	2	20	R/503/3166
Using Calculations: Addition and Subtraction of Whole Numbers	1	1	10	J/503/3259
Using Calculations: Multiplication and Division of Whole Numbers	1	2	20	R/617/6581
Understanding and Using Fractions	1	2	20	Y/503/3170
Understanding and Using Decimals	1	2	18	R/503/3278
Understanding and Using Percentages	1	2	20	D/503/3252
Measure: Time	1	2	20	Y/617/6582
Understanding Length, Weight and Capacity	1	1	10	D/617/6583
Understanding Perimeter and Area	1	1	10	J/503/3276
Understanding Volume	1	1	10	H/617/6584
Understanding and Using 2D Shapes	1	1	10	K/617/6585
Handling Data	1	2	20	M/617/6586
Data Calculations	1	1	10	K/503/3044
Probability	1	1	10	Y/503/3282

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 Level 1 Certificate in Mathematics (Stepping Stones to Functional Skills)				
				Credits: 13
Title	Level	Credit Value	GLH	Unit Reference
Understanding Numbers	1	2	20	R/503/3166
Using Calculations: Addition and Subtraction of Whole Numbers	1	1	10	J/503/3259
Using Calculations: Multiplication and Division of Whole Numbers	1	2	20	R/617/6581
Understanding and Using Fractions	1	2	20	Y/503/3170
Understanding and Using Decimals	1	2	18	R/503/3278
Understanding and Using Percentages	1	2	20	D/503/3252
Measure: Time	1	2	20	Y/617/6582
Understanding Length, Weight and Capacity	1	1	10	D/617/6583
Understanding Perimeter and Area	1	1	10	J/503/3276
Understanding Volume	1	1	10	H/617/6584
Understanding and Using 2D Shapes	1	1	10	K/617/6585
Handling Data	1	2	20	M/617/6586
Data Calculations	1	1	10	K/503/3044
Probability	1	1	10	Y/503/3282
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 3 prior to studying these qualifications.

Guided Learning Hours (GLH)

The recommended guided learning hours are:

- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Numbers: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Addition and Subtraction of Whole Numbers: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Multiplication and Division of Whole Numbers: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Fractions: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Decimals: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Percentages: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Measure: Time: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Length, Weight and Capacity: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Perimeter and Area: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Volume: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and using 2D Shapes: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Handling Data: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Data Calculations: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Probability: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills): 30
- Level 1 Extended Award in Mathematics (Stepping Stones to Functional Skills): 60
- Level 1 Certificate in Mathematics (Stepping Stones to Functional Skills): 130

Total Qualification Time (TQT)

The total qualification time is:

- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Numbers: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Addition and Subtraction of Whole Numbers: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Using Calculations: Multiplication and Division of Whole Numbers: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Fractions: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Decimals: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using Percentages: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Measure: Time: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Length, Weight and Capacity: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Perimeter and Area: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding Volume: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Understanding and Using 2D Shapes: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Handling Data: 20
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Data Calculations: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills) - Probability: 10
- Level 1 Award in Mathematics (Stepping Stones to Functional Skills): 30
- Level 1 Extended Award in Mathematics (Stepping Stones to Functional Skills): 60
- Level 1 Certificate in Mathematics (Stepping Stones to Functional 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:

- The opportunity to move towards Mathematics Functional Skills at Level 1 or 2, Mathematics Awards at Level 2 or GCSE Mathematics
- 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: https://www.skillsworkshop.org/resources/adult_numeracy_core_curriculum_dfes_2001

These qualifications also reflect the Functional skills subject content. This can be viewed at: <https://www.gov.uk/government/publications/functional-skills-subject-content-mathematics>

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.

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, refer to the latest version of the product catalogue.

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 learners 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 the reasonable adjustments and special considerations are available from the Resources/Key Documents 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 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 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 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 four weeks afterwards should any appeal be made. The work should be kept in the centre under secure conditions.

Ascentis Designed Assessments

Each Level 1 Award 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

Unit Title: **Understanding Numbers**
Unit Reference Number: **R/503/3166**

Credit Value of Unit 2

GLH of Unit 20

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand numbers up to seven digits and identify negative numbers.

This unit maps to the Adult Numeracy Core Curriculum in the following areas: N1/L1.1, N1/L1.2, N1/L1.8. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Be able to read whole numbers	1.1 Read whole numbers with up to seven digits in digit form
	1.2 Read names of whole numbers with up to seven digits
2 Be able to write whole numbers	2.1 Write whole numbers with up to seven digits in digit form
	2.2 Write names of whole numbers with up to seven digits
3 Be able to order whole numbers	3.1 Identify place value in whole numbers with up to seven digits
	3.2 Order whole numbers with up to seven digits in order of size
4 Understand the symbols for greater than and less than	4.1 Identify the symbols for greater than and less than
	4.2 Record the symbols for greater than and less than
5 Be able to round whole numbers	5.1 Round whole numbers with up to seven digits
6 Be able to recognise negative numbers in practical contexts	6.1 Identify negative temperatures

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

Digit, value, units, tens, hundreds, thousands, ten thousands, hundred thousands, millions, compare, order, greater than, less than, equal to, round, estimate, approximation, lowest, highest,

1: Be able to read whole numbers

AC 1.1 Read whole numbers with up to seven digits in digit form

Learners should develop confidence in reading whole numbers up to seven digits accurately and fluently.

Content should include:

- numbers from 0 to 9,999,999
- reading numbers containing one or more zeros
- interpreting numbers presented in tables, charts and reports
- understanding the role of place value when reading numbers

Learners should become familiar with the terminology:

- units, tens, hundreds, thousands, ten thousands, hundred thousands, millions.

AC 1.2 Read names of whole numbers with up to seven digits

Learners should read and interpret whole numbers written in words and connect these to their numerical representations.

Content should include:

- reading whole number names accurately
- recognising the language associated with thousands and millions
- matching written number names to digit forms
- identifying numerical errors in written representations

Learners should develop fluency when reading numbers commonly encountered in workplace, financial and educational contexts.

2: Be able to write whole numbers

AC 2.1 Write whole numbers with up to seven digits in digit form

Learners should accurately record whole numbers using digits.

Content should include:

- converting number names into digit form
- recording numbers containing zero placeholders

AC 2.2 Write names of whole numbers with up to seven digits

Learners should convert numbers written in digit form into words.

Content should include:

- accurately writing whole number names
- using correct place value language
- recording numbers containing thousands and millions

Learners should develop confidence writing large numbers independently.

3: Be able to order whole numbers

AC 3.1 Identify place value in whole numbers with up to seven digits

Learners should understand that the value of a digit depends upon its position.

Content should include:

- identifying digit value
- recognising place value positions
- partitioning numbers
- understanding zero as a placeholder

Learners should practice by using place value charts and expanded notation where appropriate.

AC 3.2 Order whole numbers with up to seven digits in order of size

Learners should compare, sequence and order whole numbers.

Content should include:

- ordering numbers with lowest first
- ordering numbers with highest first
- identifying largest and smallest values
- comparing numbers with similar leading digits
- compare numbers containing zero placeholders

Learners should compare numbers using place value knowledge.

4: Understand the symbols for greater than and less than**AC 4.1 Identify the symbols for greater than and less than**

Learners should understand and use:

- greater than ($>$)
- less than ($<$)
- equal to ($=$)

Content should include:

- reading comparison statements
- interpreting inequalities

AC 4.2 Record the symbols for greater than and less than

Learners should correctly apply comparison symbols when comparing numbers.

Content should include:

- completing comparison statements
- creating inequalities
- comparing whole numbers using symbols
- explaining comparisons using mathematical language

Learners should move confidently between verbal and symbolic representations.

5: Be able to round whole numbers**AC 5.1 Round whole numbers with up to seven digits**

Learners should understand rounding as a method of approximation.

Content should include:

- rounding to the nearest 10
- rounding to the nearest 100
- rounding to the nearest 1,000
- rounding to the nearest 10,000
- rounding to the nearest 100,000

Learners should understand:

- using neighbouring digits to determine rounding

6: Be able to recognise negative numbers in practical contexts**AC 6.1 Identify negative temperatures**

Learners should recognise negative numbers when presented in practical situations.

Content should include:

- understanding zero as a reference point
- reading temperatures above and below zero
- interpreting negative values on scales and number lines
- comparing positive and negative temperatures
- ordering temperature values

Learners should understand that temperatures below freezing are represented by negative numbers.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use spreadsheets, online data tables and digital reports to read and compare large numbers.	• Building confidence with large numbers can reduce maths anxiety and support greater independence when dealing with numerical information.	• Read bills, salaries, budgets, population figures, distances, timetables and statistical information.

UNIT SPECIFICATIONS

Unit Title: **Using Calculations: Addition and Subtraction of Whole Numbers**

Unit Reference Number: **J/503/3259**

Credit Value of Unit 1

GLH of Unit 10

Level of Unit L1

Introduction

This unit will give learners an opportunity to add and subtract whole numbers and check that answers are reasonable. This unit assumes that the learner has prior skills in using numbers at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding Numbers unit at Level 1 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/L1.3, N1/L1.8, N1/L1.9. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Be able to add whole numbers	1.1 Add whole numbers up to 7 digits, without a calculator
	1.2 Add whole numbers up to 7 digits, using a calculator
	1.3 Select and use the correct operation for the context using a calculator
2 Be able to subtract whole numbers	2.1 Subtract whole numbers up to 7 digits without a calculator
	2.2 Subtract whole numbers up to 7 digits, using a calculator
	2.3 Select and use the correct operation for the context using a calculator
3 Be able to check answers	3.1 Check answers using a different method
	3.2 Estimate answers by rounding numbers to nearest 10, 100 or 1000

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

Addition, subtraction, total, sum, difference, increase, decrease, altogether, place value, column method, operation, inverse, estimate, approximation, round, value, reasonable

1: Be able to add whole numbers

AC 1.1 Add whole numbers up to 7 digits, without a calculator

Learners should develop confidence in adding whole numbers accurately using mental and written methods.

Content should include:

- addition of numbers up to seven digits
- column addition methods
- mental calculation strategies
- addition involving one, two or more numbers
- exchanging/carrying where appropriate
- checking place value alignment when using written methods

Learners should understand the importance of presenting calculations clearly and using efficient written strategies.

AC 1.2 Add whole numbers up to 7 digits using a calculator

Learners should use calculators accurately to solve addition calculations involving large numbers.

Content should include:

- entering calculations correctly on a non-scientific calculator
- using calculator function keys appropriately
- interpreting calculator displays
- identifying and correcting input errors
- checking whether answers are reasonable

Learners should understand when a calculator is an efficient method and when a mental or written method may be more appropriate.

AC 1.3 Select and use the correct operation for the context using a calculator

Learners should identify situations requiring addition and apply calculations appropriately.

Content should include:

- recognising key vocabulary associated with addition
- interpreting questions presented in words
- identifying relevant information
- selecting addition as the appropriate operation
- solving contextual problems using a non-scientific calculator

Vocabulary may include:

- Total, altogether, sum, increase, combined, in total.

Learners should develop skills in translating practical situations into mathematical calculations.

2: Be able to subtract whole numbers

AC 2.1 Subtract whole numbers up to 7 digits without a calculator

Learners should develop confidence in subtracting whole numbers using mental and written methods.

Content should include:

- subtraction of numbers up to seven digits
- column subtraction methods
- exchanging/borrowing where appropriate
- subtraction involving zero placeholders
- checking place value alignment
- interpreting subtraction as finding the difference

Learners should recognise subtraction as both taking away and finding the difference between two values.

AC 2.2 Subtract whole numbers up to 7 digits using a calculator

Learners should use calculators accurately to solve subtraction calculations involving large numbers.

Content should include:

- entering subtraction calculations correctly on a non-scientific calculator
- interpreting calculator outputs
- checking answers using estimation
- identifying incorrect entries
- correcting calculator errors

AC 2.3 Select and use the correct operation for the context using a calculator

Learners should identify situations requiring subtraction and apply calculations appropriately.

Content should include:

- recognising subtraction vocabulary
- interpreting contextual information
- identifying relevant numerical information
- selecting subtraction as the appropriate operation
- solving practical problems using a non-scientific calculator

Vocabulary may include:

- difference
- decrease
- remainder
- left
- take away

Learners should develop confidence selecting the appropriate operation independently.

3: Be able to check answers**AC 3.1 Check answers using a different method**

Learners should understand that calculations can be checked using alternative approaches.

Content should include:

- inverse operations
- recalculating using a different method
- mental checking strategies
- calculator checking
- identifying calculation errors

Examples may include:

- checking an addition using subtraction
- checking a subtraction using addition
- comparing answers against estimated values

AC 3.2 Estimate answers by rounding numbers to the nearest 10, 100 or 1000

Learners should use rounding as a method of approximation when checking answers.

Content should include:

- rounding numbers to nearest 10
- rounding numbers to nearest 100
- rounding numbers to nearest 1000
- estimating addition calculations
- estimating subtraction calculations
- comparing estimates with exact answers

Learners should understand that estimation supports identification of unreasonable answers.

They should recognise that estimated answers are not exact but should be sufficiently close to indicate whether a calculation is likely to be correct.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use spreadsheet software and calculators to perform and check calculations. • Enter numerical information accurately into digital systems and compare manual and digital methods.	• Developing confidence with calculations can reduce anxiety when dealing with money, bills and numerical information. • Learners can develop resilience through checking and correcting errors.	• Use addition and subtraction to manage personal budgets, compare shopping costs, calculate savings, check invoices, monitor stock levels and interpret workplace data.

UNIT SPECIFICATIONS

Unit Title: **Using Calculations: Multiplication and Division of Whole Numbers**

Unit Reference Number: **R/617/6581**

Credit Value of Unit 2

GLH of Unit 20

Level of Unit L1

Introduction

This unit will give learners an opportunity to multiply and divide whole numbers and check that answers are reasonable. This unit assumes that the learner has prior skills in using numbers at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding Numbers unit at Level 1 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/L1.4, N1/L1.5, N1/L1.6, N1/L1.9. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Be able to multiply whole numbers	1.1 Multiply whole numbers by numbers up to 4 digits using written methods
	1.2 Multiply whole numbers by numbers up to 4 digits using a calculator
	1.3 Select and use correct operation in context using a calculator
	1.4 Calculate the square number of numbers up to 2 digits
2 Be able to divide whole numbers	2.1 Divide whole numbers by numbers up to 4 digits using written methods and interpret remainders
	2.2 Divide whole numbers by numbers up to 4 digits using a calculator and interpret remainders
	2.3 Identify division written in more than one format
	2.4 Select and use correct operation for the context using a calculator
3 Be able to check answers	3.1 Check answers using a different method
	3.2 Estimate answers by rounding numbers to nearest 10, 100 or 1000
4 Be able to recognise numerical relationships	4.1 Recall multiplication facts up to 10 x 10
	4.2 Recall multiples of 10, 50, 100 and 1000
	4.3 Make connections between multiplication and division facts
	4.4 Use simple formulae for 1 step and 2 step operations

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

Multiplication, division, multiply, divide, multiple, square number, squared, times, share, remainder, estimate, approximation, formula, rule, operation, sequence, calculation, whole number

1: Be able to multiply whole numbers

AC 1.1 Multiply whole numbers by numbers up to 4 digits using written methods

Learners should develop confidence in multiplying whole numbers accurately using formal written methods.

Content should include:

- multiplication of whole numbers by one-, two-, three- and four-digit whole numbers
- use of long multiplication methods
- use of grid methods where appropriate
- understanding place value when multiplying
- setting calculations out correctly
- checking working for accuracy

Learners should understand how each digit contributes to the final calculation and how place value affects the answer.

AC 1.2 Multiply whole numbers by numbers up to 4 digits using a calculator

Learners should use calculators accurately to solve multiplication calculations.

Content should include:

- entering calculations correctly on a non-scientific calculator
- interpreting calculator displays
- checking calculations for input errors
- using estimation to assess reasonableness of answers
- identifying when calculator use is appropriate

Learners should understand the importance of using place value knowledge when estimating expected answers.

AC 1.3 Select and use correct operation in context using a calculator

Learners should identify situations requiring multiplication and select the appropriate operation.

Content should include:

- recognising multiplication vocabulary
- interpreting contextual questions
- identifying relevant numerical information
- selecting multiplication as the appropriate operation
- solving practical problems using a non-scientific calculator

Vocabulary may include:

- multiplied by
- lots of
- groups of
- total cost
- total quantity

Learners should develop the ability to translate written situations into mathematical calculations.

AC 1.4 Calculate the square number of numbers up to 2 digits

Learners should understand square numbers as numbers multiplied by themselves.

Content should include:

- understanding the notation for squared numbers
- identifying square numbers
- calculating the square of integers from 1 to 12 and two-digit numbers ending in zero (e.g. 30^2) without a calculator
- linking square numbers to area models

Learners should become familiar with common square numbers and recognise them in mathematical contexts.

2: Be able to divide whole numbers

AC 2.1 Divide whole numbers by numbers up to 4 digits using written methods and interpret remainders

Learners should divide whole numbers accurately using written methods.

Content should include:

- short division methods
- long division methods
- division involving one-, two-, three- and four-digit whole number divisors
- interpreting remainders in context
- checking calculations using multiplication
- understanding division as sharing and grouping

Learners should recognise that remainders may be represented differently depending on context.

Content should include interpretation of remainders as:

- whole number remainders
- remaining items
- values requiring rounding
- fractions of a whole

AC 2.2 Divide whole numbers by numbers up to 4 digits using a calculator and interpret remainders

Learners should use calculators accurately when solving division problems.

Content should include:

- entering calculations correctly on a non-scientific calculator
- interpreting decimal calculator outputs
- identifying quotient and remainder relationships (context only not vocabulary)
- checking answers using estimation
- interpreting answers in context

Learners should understand that calculator answers may need to be interpreted differently depending on the situation.

AC 2.3 Identify division written in more than one format

Learners should recognise the different ways division may be represented.

Content should include:

- $\div$ notation
- worded notation
- fraction notation
- division bracket notation ('bus stop' notation)
- calculator notation

Learners should understand that: $24 \div 6$ and $\frac{24}{6}$ represent the same mathematical relationship.

Learners should confidently move between different forms of presentation.

AC 2.4 Select and use correct operation for the context using a calculator

Learners should identify situations requiring division and apply the operation appropriately.

Content should include:

- recognising division vocabulary
- interpreting contextual information
- applying division to solve practical problems
- interpreting answers appropriately
- enter calculations correctly on a non-scientific calculator

Vocabulary may include:

- divide
- share
- split
- grouped
- per
- each

Learners should understand that division is often used when quantities are shared equally or grouped.

3: Be able to check answers

AC 3.1 Check answers using a different method

Learners should understand the importance of verifying calculations.

Content should include:

- inverse operations
- calculator checking on a non-scientific calculator
- estimation methods
- alternative written methods
- Learners should recognise multiplication and division as inverse operations.

AC 3.2 Estimate answers by rounding numbers to nearest 10, 100 or 1000

Learners should use approximation to determine whether answers are reasonable.

Content should include:

- rounding values before calculating
- estimating multiplication calculations
- estimating division calculations
- comparing exact answers with estimated values
- identifying unreasonable answers

Learners should develop confidence making quick estimations before calculating.

4: Be able to recognise numerical relationships

AC 4.1 Recall multiplication facts up to 10×10

Learners should develop fluency with multiplication facts up to 10×10 .

Content should include:

- multiplication tables from 1 to 10
- links between multiplication and division

Learners should use multiplication facts to support more complex calculations.

AC 4.2 Recall multiples of 10, 50, 100 and 1000

Learners should understand and identify common multiples.

Content should include:

- sequences of multiples
- recognising patterns within multiples
- identifying multiples in practical contexts

Learners should develop fluency in generating multiples and recognising their applications.

AC 4.3 Make connections between multiplication and division facts

Learners should understand the inverse relationship between multiplication and division.

Content should include:

- fact families
- inverse operations
- checking calculations using related facts
- identifying missing numbers
- Check calculations using inverse reasoning

Learners should recognise how multiplication and division facts support one another.

AC 4.4 Use simple formulae for 1-step and 2-step operations

Learners should be introduced to the use of formulae expressed in words.

Content should include:

- understanding formulae as mathematical rules
- substituting values into simple formulae involving function machines
- carrying out calculations using one-step worded operations
- carrying out calculations using two-step worded operations
- interpreting formulae presented in practical situations

Learners should understand that formulae are commonly used to solve real-life mathematical problems efficiently.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use calculators, spreadsheets and online multiplication tools to perform and check calculations.	• Developing secure multiplication and division skills can build confidence when tackling more complex numerical tasks and reduce anxiety around calculations.	• Apply multiplication and division to budgeting, shopping, stock control, recipes, timetables, production calculations, workplace quantities and interpreting numerical information.

UNIT SPECIFICATIONS

Unit Title: **Understanding and Using Fractions**

Unit Reference Number: **Y/503/3170**

Credit Value of Unit 2

GLH of Unit 20

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand fractions and use simple ratios. This unit assumes that the learner has prior skills in using numbers at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding Numbers unit at Level 1 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/L1.7, N2/L1.1, N2/L1.2, N2/L1.3, N2/L1.11. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Be able to read common fractions and mixed numbers	1.1 Read common mixed number names
	1.2 Read common mixed numbers in digit form
	1.3 Read common non-unit fractions
2 Be able to write common fractions and mixed numbers	2.1 Write common mixed number names
	2.2 Write common mixed numbers in digit form
	2.3 Write common non-unit fractions
3 Be able to order common fractions and mixed numbers	3.1 Arrange in order of size a set of common unit, non-unit fractions and mixed numbers
4 Know common equivalent fractions	4.1 Identify and write common equivalent fractions
5 Be able to find fractions of whole number quantities and measurements	5.1 Find a unit fraction by division
	5.2 Find a non-unit fraction as a multiple of a unit fraction
	5.3 Find a non-unit fraction by a combination of unit fractions
	5.4 Use fractions in everyday situations
6 Be able to use a calculator to solve problems involving fractions	6.1 Use a calculator to solve everyday problems involving fractions
7 Understand ratio and direct proportion	7.1 Calculate quantities using a simple ratio: e.g. in mixtures
	7.2 Use direct proportion to scale quantities up or down

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

fraction, mixed number, equivalent, simplify, compare, order, whole, part, proportion, ratio, divide, multiply, share, equal parts, conversion, halves, thirds, quarters, fifths, sixths, sevenths, eighths, ninths, tenths, elevenths, estimate

1: Be able to read common fractions and mixed numbers

AC 1.1 Read common mixed number names

Learners should develop confidence reading mixed numbers expressed in words.

Content should include:

- understanding mixed numbers as whole numbers and fractions combined
- reading common mixed number names
- recognising common fractional language
- interpreting mixed numbers in practical contexts

Examples may include:

- one and a half
- two and three quarters
- four and one fifth

Learners should understand the relationship between the whole number and fractional part.

AC 1.2 Read common mixed numbers in digit form

Learners should interpret mixed numbers presented numerically.

Content should include:

- recognising mixed number notation
- identifying whole number parts
- identifying fractional parts
- converting between word and digit representations

Examples may include:

- $1\frac{1}{2}$
- $2\frac{3}{4}$
- $3\frac{2}{5}$

Learners should become familiar with common fractional notation and should begin to understand the difference between the whole number and fractions representing part of a whole.

AC 1.3 Read common non-unit fractions

Learners should read and interpret fractions with numerators greater than one.

Content should include:

- understanding numerator and denominator
- recognising non-unit fractions
- reading fractions accurately
- interpreting fractions in practical situations

Examples may include:

- $\frac{2}{3}$
- $\frac{3}{4}$
- $\frac{2}{5}$
- $\frac{7}{8}$

Learners should begin to understand fractions as representing part of a whole.

2: Be able to write common fractions and mixed numbers

AC 2.1 Write common mixed number names

Learners should accurately record mixed numbers in written form.

Content should include:

- writing mixed numbers from digit representations
- using correct fraction vocabulary
- recording whole numbers and fractions accurately
- checking written representations

Learners should become increasingly confident using fraction terminology correctly.

AC 2.2 Write common mixed numbers in digit form

Learners should represent mixed numbers accurately using mathematical notation.

Content should include:

- converting mixed number names to digit form
- recording fractions correctly

Learners should understand the standard presentation of mixed numbers.

AC 2.3 Write common non-unit fractions

Learners should write fractions accurately using appropriate mathematical notation.

Content should include:

- recording fractions from words
- writing fractions from visual representations
- writing fractions encountered in practical situations

Learners should understand that the denominator identifies the number of equal parts while the numerator identifies how many parts are selected.

3: Be able to order common fractions and mixed numbers

AC 3.1 Arrange in order of size a set of common unit, non-unit fractions and mixed numbers

Learners should compare and order fractions and mixed numbers.

Content should include:

- comparing fractions with common denominators
- comparing fractions with common numerators
- comparing mixed numbers
- arranging values in ascending and descending order

Learners should use visual models such as fraction walls, number lines and diagrams to support understanding where appropriate.

4: Know common equivalent fractions

AC 4.1 Identify and write common equivalent fractions

Learners should understand that different fractions can represent the same value.

Content should include:

- generating equivalent fractions
- simplifying fractions
- recognising common equivalent fractions
- using diagrams and visual models
- identifying equivalent fractions in practical contexts

Examples may include:

- $\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$
- $\frac{1}{3} = \frac{2}{6}$
- $\frac{3}{4} = \frac{6}{8}$

Learners should understand the relationship between multiplying and dividing numerators and denominators by the same factor.

5: Be able to find fractions of whole number quantities and measurements

AC 5.1 Find a unit fraction by division

Learners should understand that finding a unit fraction involves dividing by the denominator.

Content should include:

- calculating unit fractions of quantities
- dividing quantities into equal parts
- representing fractions visually
- solving practical problems involving fractions which may not be exactly divisible by the denominator

Examples may include:

- $\frac{1}{2}$ of 20
- $\frac{1}{3}$ of 15
- $\frac{1}{4}$ of 24

AC 5.2 Find a non-unit fraction as a multiple of a unit fraction

Learners should use unit fractions to calculate non-unit fractions.

Content should include:

- identifying the unit fraction first
- multiplying the unit fraction value
- solving practical problems involving quantities and measurements which may not be exactly divisible by the denominator.

Examples may include:

- finding $\frac{3}{5}$ of 25
- finding $\frac{3}{4}$ of 21
- finding $\frac{2}{3}$ of 20

AC 5.3 Find a non-unit fraction by a combination of unit fractions

Learners should understand how non-unit fractions can be built using unit fractions.

Content should include:

- combining fractions of quantities
- recognising relationships between fractions

Learners should explore different strategies for calculating fractional quantities efficiently.

AC 5.4 Use fractions in everyday situations

Learners should recognise applications of fractions in real-life situations.

Content should include:

- recipes
- measures
- shopping
- construction

Examples may include:

- sharing quantities equally
- calculating discount prices

Learners should understand how fractions can also support estimation and decision making.

6: Be able to use a calculator to solve problems involving fractions

AC 6.1 Use a calculator to solve everyday problems involving fractions

Learners should use calculators appropriately when solving fraction problems.

Content should include:

- entering fraction calculations on a non-scientific calculator
- interpreting calculator outputs
- checking answers for reasonableness

Learners should understand when calculator use is appropriate and when mental or written methods may be more efficient.

7: Understand ratio and direct proportion

AC 7.1 Calculate quantities using a simple ratio

Learners should understand ratio and proportion as a way of comparing and calculating quantities.

Content should include:

- interpreting worded ratio problems
- sharing quantities in a given worded ratio
- scaling quantities using simple worded ratios
- solving practical worded ratio problems

Examples may include:

- recipes
- paint mixtures

Learners should understand ratio as a comparison between two or more quantities

AC 7.2 Use direct proportion to scale quantities up or down

Learners should develop understanding of proportional reasoning.

Content should include:

- increasing quantities proportionally
- decreasing quantities proportionally
- scaling recipes
- adjusting measurements
- solving practical problems involving direct proportion

Learners should recognise situations where quantities change in the same proportion.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use online fraction tools, interactive fraction walls and calculators to visualise fraction concepts and solve calculations.	• Building confidence with fractions can reduce anxiety around everyday mathematical tasks and improve decision-making when interpreting numerical information.	• Apply fractions to cooking, budgeting, shopping discounts, measurements, DIY projects, recipes and sharing quantities fairly.

UNIT SPECIFICATIONS

Unit title: **Understanding and Using Decimals**

Unit Reference Number: **R/503/3278**

Credit Value of Unit 2

GLH of Unit 18

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand decimals and be able to calculate with them. This unit assumes that the learner has prior skills in using numbers at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding Numbers unit at Level 1 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/L1.9, N2/L1.4, N2/L1.5, N2/L1.6, N2/L1.7, N2/L1.11, MSS1/L1.1. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes		Assessment Criteria
The learner will		The learner can
1	Be able to read numbers with up to 3 decimal places	1.1 Read numbers with up to 3 decimal places
2	Be able to write numbers with up to 3 decimal places	2.1 Write numbers with up to 3 decimal places
3	Be able to order numbers with up to 3 decimal places	3.1 Arrange numbers with up to 3 decimal places
4	Understand that the position of a digit signifies its value	4.1 Identify place value in numbers with up to 3 decimal places
		4.2 Identify that the part of a number to the right of the decimal point can be written as a fraction
5	Be able to approximate decimals by rounding to a whole number or 2 decimal places	5.1 Round numbers with up to 3 decimal places to the nearest whole number
		5.2 Round numbers with up to 3 decimal places to 1 decimal place
		5.3 Round numbers with up to 3 decimal places to 2 decimal places
6	Be able to add decimals up to 2 decimal places	6.1 Add decimals up to 2 decimal places
7	Be able to subtract decimals up to 2 decimal places	7.1 Subtract decimals up to 2 decimal places
8	Be able to multiply decimals up to 2 decimal places	8.1 Multiply decimal numbers by 10 or 100
		8.2 Multiply decimals up to 2 decimal places by whole numbers
9	Be able to divide decimals up to 2 decimal places	9.1 Divide decimal numbers by 10 or 100
		9.2 Divide decimals up to 2 decimal places by whole numbers
10	Know how to use strategies to check answers	10.1 Use different strategies to check answers
11	Be able to use a calculator to calculate decimals	11.1 Use a calculator to solve everyday problems using decimals

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

decimal, decimal point, place value, tenths, hundredths, thousandths, whole number, fraction, equivalent, order, compare, round, estimate, add, subtract, multiply, divide, calculator, measure, money, value, digit, accuracy, quantity, total, equal, difference, common number names up to twenty.

1: Be able to read numbers with up to 3 decimal places

AC 1.1 Read numbers with up to 3 decimal places

Learners should develop confidence reading decimal numbers accurately in both mathematical and practical contexts.

Content should include:

- reading worded decimal numbers up to three decimal places
- understanding the significance of the decimal point
- identifying whole number and decimal parts
- reading decimal numbers from tables, charts and measurements
- recognising common decimal values used in everyday life

Examples may include:

- 3.5
- 12.75
- 4.605
- 0.125

Learners should use correct place value terminology when reading decimals.

2: Be able to write numbers with up to 3 decimal places

AC 2.1 Write numbers with up to 3 decimal places

Learners should accurately record decimal numbers using correct notation.

Content should include:

- writing decimal numbers from spoken information
- recording values shown on scales and measuring equipment
- writing decimal values from practical situations

Examples include:

- three point five
- twelve point seven five
- four point zero two
- zero point one two five

Learners should understand that incorrect placement of the decimal point can significantly alter the value represented.

3: Be able to order numbers with up to 3 decimal places

AC 3.1 Arrange numbers with up to 3 decimal places

Learners should compare and order decimal numbers accurately.

Content should include:

- ordering decimals with lowest or highest first
- comparing decimal values
- identifying highest and lowest values

Learners should use place value knowledge to justify comparisons and ordering decisions.

Examples may include:

- ordering prices
- comparing measurements
- analysing data values

4: Understand that the position of a digit signifies its value

AC 4.1 Identify place value in numbers with up to 3 decimal places

Learners should understand decimal place value and how digit position determines value.

Content should include:

- units
- tenths
- hundredths
- thousandths

Learners should:

- identify the value of individual digits
- order decimal numbers with highest or lowest first

Examples may include:

- identifying the value of the 5 in 4.562 as 5 tenths or 0.5
- recognising that 3.08 is less than 3.8

AC 4.2 Identify that the part of a number to the right of the decimal point can be written as a fraction

Learners should understand the relationship between decimals and fractions.

Content should include:

- recognising tenths as fractions
- recognising hundredths as fractions
- recognising thousandths as fractions
- converting simple decimal values to fractions
- interpreting decimals as parts of a whole

Examples may include:

- $3.5 = 3\frac{1}{2}$
- $8.75 = 8\frac{75}{100}$
- $6.123 = 6\frac{123}{1000}$

Learners should understand that decimals and fractions can represent equivalent values.

5: Be able to approximate decimals by rounding to a whole number or 2 decimal places

AC 5.1 Round numbers with up to 3 decimal places to the nearest whole number

Learners should understand how rounding provides an approximate value.

Content should include:

- applying rounding rules to money calculations to round to nearest whole penny (for values less than £1) or nearest whole pound (for values over £1)

Learners should recognise situations where rounded values are appropriate.

AC 5.2 Round numbers with up to 3 decimal places to 1 decimal place

Learners should apply rounding procedures accurately to one decimal place.

Content should include:

- identifying tenths and hundredths
- rounding using standard conventions
- comparing rounded and unrounded values
- interpreting rounded answers in practical contexts

Examples may include prices, measurements and data.

AC 5.3 Round numbers with up to 3 decimal places to 2 decimal places

Learners should accurately round values to two decimal places.

Content should include:

- identifying hundredths and thousandths
- rounding decimal values appropriately
- using rounded values in estimation

Learners should recognise that financial calculations commonly use two decimal places.

6: Be able to add decimals up to 2 decimal places

AC 6.1 Add decimals up to 2 decimal places

Learners should perform addition calculations involving decimal numbers.

Content should include:

- aligning decimal points correctly
- using column methods where appropriate
- solving practical problems involving money and measures

Examples may include:

- adding prices
- combining measurements
- calculating totals

Learners should understand the importance of place value when performing calculations.

7: Be able to subtract decimals up to 2 decimal places

AC 7.1 Subtract decimals up to 2 decimal places

Learners should accurately subtract decimal numbers.

Content should include:

- aligning decimal points
- using written methods
- interpreting subtraction in context

Examples may include:

- finding change
- calculating differences in measurements
- comparing costs

Learners should understand subtraction as both taking away and finding the difference.

8: Be able to multiply decimals up to 2 decimal places

AC 8.1 Multiply decimal numbers by 10 or 100

Learners should understand how multiplying by powers of ten affects place value.

Content should include:

- identifying movement of digits through place value columns
- understanding the effect on decimal position
- applying multiplication in practical situations

Examples may include:

- 4.6×10
- what is the total cost of 100 tickets at £3.45 each?

AC 8.2 Multiply decimals up to 2 decimal places by whole numbers

Learners should multiply decimals accurately using written and mental methods.

Content should include:

- multiplication involving money and measures
- understanding place value in multiplication
- interpreting answers in context
-

Examples may include:

- multiple purchases
- repeated measurements

9: Be able to divide decimals up to 2 decimal places

AC 9.1 Divide decimal numbers by 10 or 100

Learners should understand how division by powers of ten affects place value.

Content should include:

- recognising digit movement within place value columns
- interpreting decimal place changes
- solving practical problems using division by 10 and 100

Examples may include:

- converting measurements (conversions will be given)
- Sharing quantities

AC 9.2 Divide decimals up to 2 decimal places by whole numbers

Learners should divide decimal values accurately by whole numbers up to ten.

Content should include:

- equal sharing calculations with and without a calculator
- interpreting decimal answers
- solving practical problems involving money and measures

Learners should understand how decimal values can represent partial amounts.

10: Know how to use strategies to check answers**AC 10.1 Use different strategies to check answers**

Learners should understand that calculations should be checked for accuracy.

Content should include:

- estimation
- inverse operations

Learners should develop confidence identifying and correcting errors independently.

11: Be able to use a calculator to calculate decimals**AC 11.1 Use a calculator to solve everyday problems using decimals**

Learners should use calculators effectively when solving decimal calculations.

Content should include:

- entering decimal numbers correctly on a non-scientific calculator
- interpreting calculator displays
- selecting appropriate operations
- checking answers for reasonableness
- solving real-life problems

Examples may include:

- shopping calculations
- financial calculations
- measurements
- budgeting activities

Learners should understand when calculator use is appropriate and when alternative methods may be more efficient.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use spreadsheets, online calculators and digital measuring tools to explore decimal values and calculations. • Use financial apps and digital shopping platforms to identify decimal numbers in context.	• Developing confidence with decimals can reduce anxiety when working with money, measurements and everyday calculations. • Learners can build resilience through estimating, checking and correcting answers.	• Apply decimal skills to shopping, budgeting, wages, banking, recipes, measurements, travel distances, calculations involving quantities and costs.

UNIT SPECIFICATIONS

Unit Title: **Understanding and Using Percentages**
Unit Reference Number: **D/503/3252**

Credit Value of Unit 2

GLH of Unit 20

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand percentages. This unit assumes that the learner has prior skills in using fractions and decimals at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding and Using Fractions and the Understanding and Using Decimals units at Level 1 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/L1.8, N2/L1.9, N2/L1.10, N2/L1.11. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Understand whole number percentages	1.1 Read the percentage symbol
	1.2 Write the percentage symbol
	1.3 Identify 100% as the whole
	1.4 Identify 1% as one part of 100
2 Be able to calculate percentage parts of whole number quantities	2.1 Find 1% of a quantity
	2.2 Find 10% of a quantity
	2.3 Find 5% or 20% of a quantity
	2.4 Find 50%, 25% or 75% of a quantity
	2.5 Find any whole number % of a quantity
3 Understand how to calculate percentage increase	3.1 Find percentage increase
	3.2 Calculate simple interest in multiples of 5% on amounts of money
4 Understand how to calculate percentage decrease	4.1 Find percentage decrease
	4.2 Calculate discounts in multiples of 5% on amounts of money
5 Be able to use a calculator to calculate percentages	5.1 Calculate percentages using a calculator
	5.2 Use a calculator to solve everyday problems involving percentages

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

percentage, percent, %, whole, proportion, fraction, decimal, equivalent, increase, decrease, interest, simple interest, discount, reduction, sale price, original value, percentage change, quantity, amount, calculate, estimate, approximation, compare, ratio, proportion, financial literacy, VAT, saving, profit, loss, calculator, operation, reasonableness, value, common number names up to one hundred

1: Understand whole number percentages

AC 1.1 Read the percentage symbol

Learners should recognise and interpret the percentage symbol (%).

Content should include:

- recognising the percentage symbol in different contexts
- identifying percentages in advertisements, sales and reports

Examples may include:

- write 35% in words

Learners should understand that percentages are commonly used to compare quantities and describe proportions.

AC 1.2 Write the percentage symbol

Learners should accurately record percentages using the correct notation.

Content should include:

- writing percentages correctly
- placing the percentage symbol appropriately
- recording percentages from written information

Examples may include:

- write twelve percent using numbers and the percentage symbol

Learners should become confident using percentage notation independently.

AC 1.3 Identify 100% as the whole

Learners should understand that 100% represents a complete quantity.

Content should include:

- recognising 100% as the whole amount
- interpreting diagrams and visual representations
- understanding percentages greater than and less than 100%

Examples may include:

- 100% attendance
- 100% of a quantity
- completion of a task

Learners should understand that all percentage calculations are based on the whole being represented as 100%.

AC 1.4 Identify 1% as one part of 100

Learners should understand that 1% represents one hundredth of a whole.

Content should include:

- interpreting 1% visually
- recognising 1% in practical situations

Learners should appreciate that understanding 1% supports calculation of larger percentages.

2: Be able to calculate percentage parts of whole number quantities

AC 2.1 Find 1% of a quantity

Learners should calculate 1% of whole number quantities.

Content should include:

- dividing by 100 without a calculator
- calculating 1% of practical quantities

Examples may include:

- 1% of £500
- 1% of 3200 g

Learners should understand that 1% calculations provide a foundation for more complex percentage calculations.

AC 2.2 Find 10% of a quantity

Learners should calculate 10% efficiently using known strategies.

Content should include:

- dividing by 10 without a calculator
- practical applications involving money and quantities
- checking reasonableness of answers

Examples may include:

- 10% of £50
- 10% of 800kg

Learners should recognise that 10% is commonly used in everyday calculations.

AC 2.3 Find 5% or 20% of a quantity

Learners should calculate common percentages using efficient strategies.

Content should include:

- deriving 5% from 10%
- deriving 20% from 10%
- solving practical problems involving common percentages

Examples may include:

- 5% discount
- 20% VAT

Learners should use known facts to support efficient mental calculations.

AC 2.4 Find 50%, 25% or 75% of a quantity

Learners should calculate commonly used percentages associated with fractions.

Content should include:

- linking percentages to fractions
- recognising 50% as one half
- recognising 25% as one quarter
- recognising 75% as three quarters
- solving practical percentage problems

Examples may include:

- half-price reductions
- quarter portions
- best buy

Learners should understand the relationship between percentages, fractions and decimals.

AC 2.5 Find any whole number percentage of a quantity

Learners should apply percentage calculation methods to a variety of contexts.

Content should include:

- breaking calculations into manageable steps
- combining known percentage values
- applying percentages to quantities and money
- using non scientific calculators where appropriate
- checking answers through estimation

Examples may include:

- 35% of £80
- 12% of 250
- 65% of a quantity

Learners should develop flexibility when solving percentage problems.

3: Understand how to calculate percentage increase

AC 3.1 Find percentage increase

Learners should calculate percentage increases in practical situations.

Content should include:

- identifying original and new values
- calculating increases
- expressing increases as percentages

Examples may include:

- salary increases
- price rises
- increased attendance figures
- population growth
- exam score improvements

Learners should understand how percentage increase is used to compare change over time.

AC 3.2 Calculate simple interest in multiples of 5% on amounts of money

Learners should understand simple interest as a percentage increase applied to money.

Content should include:

- interpreting interest rates
- calculating interest using multiples of 5%
- calculating total amounts after interest
- solving practical money problems

Examples may include:

- savings accounts
- car loans
- investment scenarios

Learners should understand that interest represents money earned or paid over time.

4: Understand how to calculate percentage decrease

AC 4.1 Find percentage decrease

Learners should calculate percentage decreases in practical situations.

Content should include:

- identifying original and reduced values
- calculating reductions
- expressing reductions as percentages
- interpreting percentage change

Examples may include:

- reduced stock levels
- weight loss in pets
- reduced spending
- car depreciation

Learners should understand how percentages help compare reductions fairly.

AC 4.2 Calculate discounts in multiples of 5% on amounts of money

Learners should calculate discounts applied to prices.

Content should include:

- interpreting discount percentages
- calculating reductions in price
- finding sale prices
- comparing discounts

Examples may include:

- 10% discount
- 15% reduction
- 50% sale
- 45% decrease in sales

Learners should understand how discounts are commonly used in retail and consumer contexts.

Learning Outcome 5: Be able to use a calculator to calculate percentages

AC 5.1 Calculate percentages using a calculator

Learners should use calculators accurately when solving percentage calculations.

Content should include:

- entering calculations correctly on a non-scientific calculator
- interpreting calculator outputs
- selecting appropriate operations
- knowing how to convert $\frac{1}{2}$ to 50% on a non-scientific calculator
- knowing how to convert $\frac{1}{4}$ to 25% on a non-scientific calculator
- knowing how to convert $\frac{3}{4}$ to 75% on a non-scientific calculator
- knowing how to convert decimals to percentages (e.g. 0.3 to 30%) on a non-scientific calculator
- checking answers using estimation
- identifying input errors

Learners should understand the importance of accuracy when entering percentage calculations.

AC 5.2 Use a calculator to solve everyday problems involving percentages

Learners should apply percentage skills to real-life situations.

Content should include:

- financial calculations
- discounts and sales
- interest calculations
- workplace percentage information
- percentage comparisons

Examples may include:

- shopping discounts
- VAT calculations
- budgeting
- savings and loans

Learners should develop confidence selecting appropriate methods and interpreting answers in context including be able to round money to the nearest penny

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use online percentage calculators, spreadsheets and financial apps to explore percentage calculations and compare methods. • Use digital shopping websites to investigate discounts and price changes.	• Developing confidence with percentages can support informed financial decision-making and increase confidence when interpreting information presented as percentages.	• Apply percentages to shopping, budgeting, savings, interest rates, discounts, sales, survey results and financial planning.

UNIT SPECIFICATIONS

Unit Title: **Measure: Time**

Unit Reference Number: **Y/617/6582**

Credit Value of Unit 2

GLH of Unit 20

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand times and dates.

This unit maps to the Adult Numeracy Core Curriculum in the following areas: MSS1/L1.2, MSS1/L1.3, MSS1/L1.4. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Understand times written in different formats	1.1 Read time from a 24-hour clock
	1.2 Record time in 24-hour notation
	1.3 Match 12-hour and 24-hour times
	1.4 Convert between 12-hour and 24-hour times
	1.5 Choose appropriate devices to measure different lengths of time
	1.6 Extract simple information from timetables
2 Understand dates written in different formats	2.1 Identify common date formats
	2.2 Use common date formats
	2.3 Use a calendar: e.g. to calculate the length of time between given dates
3 Know the relationship between units of time	3.1 Identify uses of different units of time: e.g. for activities or events
	3.2 Estimate time using appropriate units: e.g. time taken for different activities or events
4 Be able to calculate using time	4.1 Identify the relationships between units of time
	4.2 Convert between units of time
	4.3 Add hours and minutes
	4.4 Subtract hours and minutes
	4.5 Calculate durations of time
	4.6 Compare durations of time

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

digital clock, analogue clock, 12-hour clock, 24-hour clock, am, pm, timetable, calendar, date, day, month, year, schedule, timescale, timeframe, device, units, hours, minutes, seconds, number names up to thirty, forty -five, quarter past, quarter to, half past, display, arrive, leave, morning, afternoon, evening, measuring instrument, stopwatch, wristwatch, fortnight, week, month names from January to December, start, finish, midday, midnight, kitchen timer, rotas.

1: Understand times written in different formats

AC 1.1 Read time from a 24-hour clock

Learners should develop confidence reading time expressed in 24-hour format.

Content should include:

- recognising 24-hour clock notation
- interpreting times throughout the day
- understanding morning and afternoon equivalents
- reading times displayed digitally

Examples may include:

- 08:15 is quarter past eight
- 12:30 is half past twelve
- 15:45 is quarter to four
- 21:20 is twenty past nine

Learners should understand that 24-hour time is widely used in transport, healthcare and workplace settings.

AC 1.2 Record time in 24-hour notation

Learners should accurately write times using 24-hour notation.

Content should include:

- recording times in the correct format
- converting analogue clock times to 24-hour notation

Learners should become confident recording times for appointments, work shifts and timetables.

AC 1.3 Match 12-hour and 24-hour times

Learners should understand the relationship between 12-hour and 24-hour clock systems.

Content should include:

- matching equivalent times
- recognising am and pm
- identifying midday and midnight
- interpreting timetables using both systems

Examples may include:

- 2:00 pm = 14:00
- 9:05 am = 09:05
- quarter to seven in the evening = 18:45

Learners should recognise where each format is commonly used and should only use the following formats to represent, say, twenty past seven: 7:20, 07:20, 0720, (or 19:20 or 1920 if it is in the evening)

AC 1.4 Convert between 12-hour and 24-hour times

Learners should accurately convert between time formats.

Content should include:

- converting am times to 24-hour format
- converting pm times to 24-hour format
- understanding midday and midnight conventions
- converting 24-hour times 12-hour format using a.m. or p.m. correctly

Examples may include:

- 3:24 am = 0324
- 15:19 = 3:19 pm

Learners should develop fluency moving between both systems in practical contexts.

AC 1.5 Choose appropriate devices to measure different lengths of time

Learners should select suitable timing devices for different situations.

Content should include:

- clocks, wristwatches, stopwatches, kitchen timers, calendars.

Examples may include:

- timing a sporting activity
- setting an alarm
- recording cooking times
- measuring a journey

Learners should understand which device is most appropriate in different contexts.

AC 1.6 Extract simple information from timetables

Learners should interpret information presented within timetables.

Content should include:

- departure or arrival times
- start and finish times
- identifying relevant information
- determining duration between listed times

Examples may include:

- bus timetables or train schedules
- lesson timetables
- work rotas

Learners should recognise timetables as an important source of practical information.

2: Understand dates written in different formats**AC 2.1 Identify common date formats**

Learners should recognise dates written in different ways.

Content should include:

- numerical formats in the form, day then month then year
- written date formats
- abbreviated month formats
- digital date formats

Examples may include:

- 09/07/2026
- 9 July 2026
- July 9th 2026
- 09 Jul 2026

Learners should understand that date formats may vary between organisations and systems.

AC 2.2 Use common date formats

Learners should accurately record dates using commonly used formats.

Content should include:

- writing dates correctly with day then month then year if written in numerical form
- interpreting dates in documents
- completing forms requiring dates in the form DD/MM/YY or DD/MM/YYYY

Learners should apply date skills within practical contexts.

AC 2.3 Use a calendar

Learners should use calendars to organise and interpret time-related information.

Content should include:

- locating dates
- identifying days of the week
- calculating time between dates
- planning future events
- identifying recurring events

Examples may include:

- calculating weeks until an event
- identifying appointment dates
- planning work schedules

Learners should understand how calendars support organisation and time management.

3: Know the relationship between units of time

AC 3.1 Identify uses of different units of time

Learners should understand how different units of time are used in everyday situations.

Content should include selecting appropriate units from

- seconds
- minutes
- hours
- days
- weeks
- months
- years

Examples may include:

- seconds for sporting events
- minutes for cooking times
- hours for work shifts
- years for age and long-term planning

Learners should recognise the most appropriate unit for different events and activities.

AC 3.2 Estimate time using appropriate units

Learners should estimate durations using suitable measures of time.

Content should include:

- estimating short durations
- estimating longer periods
- selecting appropriate units

Examples may include:

- travelling to work
- completing a task
- attending an appointment
- participating in an activity

Learners should develop awareness of realistic time expectations.

4: Be able to calculate using time

AC 4.1 Identify the relationships between units of time

Learners should understand the conversion relationships between common units of time.

Content should include:

- 60 seconds = 1 minute
- 60 minutes = 1 hour
- 24 hours = 1 day
- 7 days = 1 week
- 14 days = 1 fortnight
- 12 months = 1 year

Learners should use these relationships to support time calculations.

AC 4.2 Convert between units of time

Learners should convert accurately between different units.

Content should include:

- minutes and hours
- hours and days
- days and weeks
- weeks and months

Examples may include:

- converting 120 minutes into hours
- converting 3 days into hours
- converting weeks into days

Learners should apply appropriate conversion strategies.

AC 4.3 Add hours and minutes

Learners should calculate totals involving time.

Content should include:

- adding durations
- carrying minutes into hours
- calculating finish times
- solving practical time problems

Examples may include:

- journey times
- work shifts
- appointments

Learners should understand how time calculations differ from standard decimal calculations.

AC 4.4 Subtract hours and minutes

Learners should calculate differences between times.

Content should include:

- finding elapsed time
- calculating time remaining
- working backwards from a finish time
- interpreting time intervals

Examples may include:

- travel durations
- lesson lengths
- event timings

Learners should check answers using estimation where appropriate.

AC 4.5 Calculate durations of time

Learners should determine how long activities last.

Content should include:

- start and finish times
- elapsed time calculations
- interpreting timetables
- planning activities

Examples may include:

- journey durations
- work shifts
- appointment lengths

Learners should develop confidence in solving practical duration problems

AC 4.6 Compare durations of time

Learners should compare time intervals and durations.

Content should include:

- identifying longer and shorter durations
- ordering durations
- comparing schedules
- evaluating time differences

Examples may include:

- comparing journeys
- comparing activities
- comparing work shifts

Learners should use appropriate units when making comparisons.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use digital calendars, scheduling tools, online timetables and smartphone clocks to investigate different ways time is represented and managed.	• Effective time management can reduce stress, support organisation and improve confidence when managing appointments, work commitments and daily routines.	• Apply time skills to work rotas, travel planning, appointment management, cooking, fitness activities, study schedules and personal organisation.

UNIT SPECIFICATIONS

Unit Title: **Understanding Length, Weight and Capacity**

Unit Reference Number: **D/617/6583**

Credit Value of Unit 1

GLH of Unit 10

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand measures of length, weight and capacity.

This unit maps to the Adult Numeracy Core Curriculum in the following areas: MSS1/L1.5, MSS1/L1.6, MSS1/L1.7. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Understand metric units of measurement	1.1 Identify metric units of length, weight and capacity including their abbreviations
	1.2 Convert measurements of length, weight and capacity from one metric unit to another
	1.3 Add units of measure within the same system in practical situations
	1.4 Subtract units of measure within the same system in practical situations
2 Be able to use units for measurement	2.1 Choose units of measurement for different measuring tasks
3 Be able to use instruments for measurement	3.1 Choose measuring instruments for different measuring tasks
4 Understand the symbols for greater than and less than	4.1 Identify the symbols for greater than and less than
5 Understand simple scales	5.1 Recognise simple scales on maps or drawings
	5.2 Use simple scales on maps or drawings

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary:

metric, measurement, length, distance, width, height, weight, mass, capacity, volume, millimetre, centimetre, metre, kilometre, gram, kilogram, millilitre, litre, mm, cm, m, km, g, kg, ml, l, conversion, scale, estimate, compare, greater than, less than, equal to, unit, accuracy, dimension, inch, feet, yards, miles, ounces, pounds, stones, centilitres, cl, pints, gallons, bottle, cup, glass, bowl, jar, can, bag, box, basket, bucket, jug, pan, watering can, fish tank, spoon, kettle, mug, flask, vase, teapot, bath, sink, convert, total, difference, bathroom scales, rulers, tape measures, kitchen scales, measuring cylinders, weighing scales, measuring containers, stop watches, >, <, =, liquid, floor plan, map, convert

1: Understand metric units of measurement

AC 1.1 Identify metric units of length, weight and capacity including their abbreviations

Learners should develop familiarity with common metric units.

Content should include:

- millimetres (mm)
- centimetres (cm)
- metres (m)
- kilometres (km)
- grams (g)
- kilograms (kg)
- millilitres (ml)
- litres (l)

Learners should:

- recognise unit abbreviations
- identify metric units amongst imperial units.

AC 1.2 Convert measurements of length, weight and capacity from one metric unit to another

Learners should convert accurately between metric units.

Content should include:

- converting millimetres and centimetres
- converting centimetres and metres
- converting grams and kilograms
- converting millilitres and litres
- understanding decimal relationships within the metric system

Learners should know:

- 1000 mg = 1 g
- 1000 g = 1kg
- 10 mm = 1 cm
- 100 cm = 1 m
- 1000 m = 1 km
- 1,000 ml = 1 litre

Examples may include:

- converting 800 cm to 8 m
- converting 2 kg to 2000 g

Learners should use conversion knowledge to solve practical measurement problems.

AC 1.3 Add units of measure within the same system in practical situations

Learners should perform calculations involving measures using the same unit.

Content should include:

- adding lengths
- adding weights
- adding capacities
- solving practical measurement problems
- checking answers for reasonableness

Examples may include:

- combining lengths of materials
- totalling ingredient weights
- adding liquid quantities

Learners should recognise real-life situations where measurement calculations are required

AC 1.4 Subtract units of measure within the same system in practical situations

Learners should calculate differences between measured values.

Content should include:

- subtracting lengths
- subtracting weights
- subtracting capacities
- calculating quantities remaining
- finding differences between measurements

Examples may include:

- remaining liquid after use
- difference in weight
- material used during a task

Learners should understand subtraction as both taking away and finding the difference.

2: Be able to use units for measurement

AC 2.1 Choose units of measurement for different measuring tasks

Learners should select the most suitable unit for a given task.

Content should include:

- selecting metric units appropriately (imperial units are also permitted)
- considering the size of the object or quantity being measured

Examples may include:

- kilometres for long distances
- metres for room dimensions
- centimetres for items less than one metre in length
- grams for lightweight objects
- litres for larger liquid quantities

Learners should understand why certain units are more appropriate than others in particular contexts.

3: Be able to use instruments for measurement

AC 3.1 Choose measuring instruments for different measuring tasks

Learners should identify and use appropriate measuring instruments.

Content should include:

- rulers, tape measures, kitchen scales, measuring cylinders, weighing scales, jugs, measuring containers, stop watches.

Examples may include:

- measuring room dimensions
- weighing ingredients
- measuring liquid capacity

Learners should understand the purpose and appropriate use of different measuring tools.

4: Understand the symbols for greater than and less than

AC 4.1 Identify the symbols for greater than and less than

Learners should understand how measurements can be compared using mathematical symbols.

Content should include:

- greater than ($>$)
- less than ($<$)
- equal to ($=$)

Learners should:

- compare measurements
- interpret measurement statements
- identify larger and smaller values
- complete comparison statements

Examples may include:

- 3 kg > 2 kg
- 150 cm < 2 m
- 1 litre = 1000 ml

Learners should use measurement contexts to strengthen understanding of comparison symbols.

5: Understand simple scales

AC 5.1 Recognise simple scales on maps or drawings

Learners should understand that scales represent relationships between real objects and drawings.

Content should include:

- recognising simple map scales
- interpreting diagrams drawn to scale
- understanding that scale drawings represent real sizes proportionally
- identifying scale information on plans and maps

Examples may include:

- maps
- floor plans
- simple technical drawings

Learners should recognise situations where scales are used in everyday life.

AC 5.2 Use simple scales on maps or drawings

Learners should apply scale information to solve practical problems.

Content should include:

- measuring distances on maps
- interpreting scaled diagrams
- calculating real-life distances from simple scales
- comparing measurements using scale information

Examples may include:

- finding distances on maps
- interpreting room plans
- using simple construction or design drawings

Learners should develop confidence applying scale information accurately.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use online mapping tools, digital scales, measuring apps and interactive conversion activities to investigate measurement concepts. • Use spreadsheets to compare and convert measurements.	• Understanding measurements can promote independence when preparing food, following health guidance and participating in fitness activities that involve distance, weight or capacity.	• Apply measurement skills to cooking, shopping, DIY projects, travel planning, fitness tracking or interpreting product information.

UNIT SPECIFICATIONS

Unit Title: **Understanding Perimeter and Area**
Unit Reference Number: **J/503/3276**

Credit Value of Unit 1

GLH of Unit 10

Level of Unit L1

Introduction

This unit will give learners an opportunity to find the perimeters and areas of shapes. This unit assumes that the learner has prior skills in understanding length, weight and capacity at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding Length, Weight and Capacity unit at Level 1 or equivalent units. Alternatively, the learner may be asked to demonstrate the skills in understanding length, weight and capacity through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas: MSS1/L1.8, MSS1/L1.9. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Understand the perimeters of shapes	1.1 Identify perimeter as being measured in units of length
	1.2 Produce different squares and rectangles with the same perimeter
2 Be able to find the perimeter of shapes	2.1 Find the perimeters of shapes in different ways
	2.2 Find a formula in words for calculating the perimeter of rectangular shapes
	2.3 Check the formula using a different method
	2.4 Find the perimeters of rectangular shapes using a formula
3 Be able to read and record measurement of an area	3.1 Read and write units of measure for area in words and in abbreviated form
	3.2 Identify measurements used to calculate the area
4 Be able to find the areas of rectangles	4.1 Write area using square units
	4.2 Find the area of drawings on squared paper by counting squares
	4.3 Find the areas of rectangular shapes identifying and using the formula

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

perimeter, area, length, width, height, dimension, boundary, distance, edge, side, rectangle, square, shape, formula, measurement, unit, square unit, square centimetre, square metre, square millimetre, km^2 , cm^2 , m^2 , mm^2 , calculate, estimate, accuracy, scale, diagram, plan, surface, length $\times$ width, linear measurement, rectangular shape, rectangle, square, dimensions, millimetre, mm, centimetre, cm, metre, m, kilometre, km, addition, multiplication, approximate

1: Understand the perimeters of shapes

AC 1.1 Identify perimeter as being measured in units of length

Learners should understand that perimeter is the total distance around the outside edge of a shape.

Content should include:

- recognising perimeter as a linear measure
- identifying units used for perimeter
- distinguishing perimeter from area
- interpreting perimeter in practical contexts

Examples may include:

- fencing a garden
- framing a picture
- edging a pathway
- choosing the correct units for perimeter from a list of units

Learners should recognise that perimeter measurements are expressed using units of length such as millimetres, centimetres and metres.

AC 1.2 Produce different squares and rectangles with the same perimeter

Learners should understand that different shapes can have the same perimeter.

Content should include:

- investigating rectangles with equal perimeters
- exploring relationships between side lengths
- measuring and checking perimeters

Examples may include:

- rectangles measuring $8\text{cm} \times 2\text{cm}$ and $6\text{cm} \times 4\text{cm}$
- squares and rectangles with identical perimeter values
- making rectangles or squares with 16cm of string

Learners should begin to recognise that shapes with the same perimeter may have different areas.

2: Be able to find the perimeter of shapes

AC 2.1 Find the perimeters of shapes in different ways

Learners should calculate perimeter using a variety of methods.

Content should include:

- counting units on diagrams
- adding side lengths
- measuring sides using rulers
- interpreting given dimensions

Examples may include:

- regular shapes
- irregular shapes
- practical measurement tasks
- finding the perimeter of a rectangle in two different ways

Learners should understand that all side lengths contribute to the perimeter.

AC 2.2 Find a formula in words for calculating the perimeter of rectangular shapes

Learners should develop understanding of perimeter formulae.

Content should include:

- recognising patterns in perimeter calculations
- writing perimeter rules in words
- understanding how length and width contribute to perimeter

Examples may include:

- perimeter = length + length + width + width
- perimeter = add all sides together
- perimeter = length add width then times by two

Learners should understand why perimeter formulae work.

AC 2.3 Check the formula using a different method

Learners should verify perimeter calculations using alternative approaches.

Content should include:

- measuring shapes directly
- adding side lengths individually
- using a combination of addition and multiplication

Learners should understand the importance of checking mathematical results.

AC 2.4 Find the perimeters of rectangular shapes using a formula

Learners should apply perimeter formulae accurately.

Content should include:

- substituting measurements into formulae
- calculating perimeter using dimensions provided
- applying formulae in practical contexts

Examples may include:

- rooms
- gardens
- sports pitches
-

Learners should become confident in selecting and applying appropriate formulae.

3: Be able to read and record measurement of an area**AC 3.1 Read and write units of measure for area in words and abbreviated form**

Learners should understand how area is represented and recorded.

Content should include:

- square millimetres (mm²)
- square centimetres (cm²)
- square metres (m²)

Learners should:

- convert between square units in words or unit notation
- read area measurements correctly
- record area measurements using standard notation
- distinguish area units from length units

Learners should understand why area uses square units.

AC 3.2 Identify measurements used to calculate the area

Learners should recognise which dimensions are required to calculate area.

Content should include:

- identifying length and width
- recognising relevant measurements in words or unit form
- interpreting diagrams and plans
- selecting appropriate dimensions

Learners should understand that area measures the space inside a shape.

4: Be able to find the areas of rectangles

AC 4.1 Write area using square units

Learners should record area calculations correctly.

Content should include:

- using appropriate square units
- recording answers accurately
- recognising unit notation

Learners should understand the importance of including units in area calculations.

AC 4.2 Find the area of drawings on squared paper by counting squares

Learners should develop visual understanding of area.

Content should include:

- counting complete squares
- estimating partial squares where appropriate
- comparing areas visually
- recognising area as the number of square units covering a surface

Examples may include:

- floor plans
- diagrammatic shapes
- simple grid-based designs

Learners should use squared paper to reinforce understanding before applying formulae.

AC 4.3 Find the areas of rectangular shapes identifying and using the formula

Learners should calculate area using the standard rectangle formula.

Content should include:

- $\text{area} = \text{length} \times \text{width}$
- identifying length and width
- substituting values accurately
- calculating area using measurements provided
- solving practical problems involving area

Examples may include:

- flooring calculations
- painting walls
- room measurements
- gardening projects

Learners should understand how area calculations support decision-making in practical situations.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use online geometry tools, design software and interactive area and perimeter activities to explore measurement concepts. • Use spreadsheets to calculate perimeter and area from given measurements.	• Practical measurement activities can build confidence and support logical problem-solving skills. • Learners can develop independence by applying mathematical skills to real-life situations.	• Apply perimeter and area skills to home improvement projects, gardening or room layouts,

UNIT SPECIFICATIONS

Unit Title: **Understanding Volume**
Unit Reference Number: **H/617/6584**

Credit Value of Unit 1

GLH of Unit 10

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand how to find volumes. This unit assumes that the learner has prior skills in understanding length, weight and capacity at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding Length, Weight and Capacity unit at Level 1 or equivalent units. Alternatively, the learner may be asked to demonstrate the skills in understanding length, weight and capacity through an initial assessment.

This unit maps to the Adult Numeracy Core Curriculum in the following areas: MSS1/L1.10. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Understand how volume is measured	1.1 Identify that volume is a measure of 3D space
	1.2 Identify volume is measured in cubic units
	1.3 Read and record units of measure of volume
2 Know how to find the volume of cuboid shapes	2.1 Use practical methods to find the volume of a cuboid container
	2.2 Identify the dimensions of a cuboid to calculate volume
	2.3 Use the formula to calculate the volume of a cuboid
3 Know how to find the volume of a cube	3.1 Identify the dimensions of a cube
	3.2 Use the formula to calculate the volume of a cube

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

volume, cubic kilometre, cubic centimetre, cubic metre, cubic millimetre, kilometre cubed, metre cubed, centimetre cubed, millimetre cubed, cm^3 , m^3 , mm^3 , km^3 cube, cuboid, three-dimensional, 3D, 2D, dimension, length, width, height, space, capacity, container, formula, calculate, measurement, estimate, surface, area, unit cube, dimension, scale, accuracy, measurement, shape, geometry, distance, box, plastic tub, wooden cubes, jug, tank, equipment,

1: Understand how volume is measured

AC 1.1 Identify that volume is a measure of 3D space

Learners should understand that volume measures the amount of space occupied by a three-dimensional object.

Content should include:

- recognising three-dimensional shapes
- understanding the difference between area and volume
- identifying space within an 3D object
- exploring practical examples of volume

Examples may include:

- storage boxes, containers, rooms, packaging.

Learners should understand that volume measures the space inside an object rather than the area of its surface.

AC 1.2 Identify volume is measured in cubic units

Learners should recognise that volume is measured using cubic units.

Content should include:

- cubic centimetres, centimetres cubed (cm^3)
- cubic metres, metres cubed, (m^3)
- cubic millimetres, millimetres cubed, (mm^3)
- cubic kilometres, kilometres cubed, (km^3)

Learners should:

- recognise cubic notation
- understand why cubic units are used
- distinguish between linear, square and cubic measurements
- interpret volume measurements presented in practical contexts

Learners should understand that cubic units represent length, width and height combined.

AC 1.3 Read and record units of measure of volume

Learners should accurately interpret and record volume measurements.

Content should include:

- reading volume measurements from diagrams and labels
- recording answers using correct unit notation
- selecting appropriate volume units

Learners should understand the importance of including units when recording answers.

2: Know how to find the volume of cuboid shapes

AC 2.1 Use practical methods to find the volume of a cuboid container

Learners should investigate volume through practical activities.

Content should include:

- filling containers with cubes
- counting cubic units
- comparing capacities of different containers
- counting how many jug of water is needed to fill a container

Examples may include:

- boxes, storage containers, tanks, packaging.

Learners should understand volume as the number of cubic units that fit within a shape.

AC 2.2 Identify the dimensions of a cuboid to calculate volume

Learners should recognise the dimensions needed to find volume.

Content should include:

- length, width, height

Learners should:

- identify dimensions from diagrams
- measure dimensions where appropriate
- distinguish between different dimensions
- use dimensions accurately in calculations

Examples may include labelled diagrams, plans and practical objects.

AC 2.3 Use the formula to calculate the volume of a cuboid

Learners should calculate cuboid volume using the standard formula.

Content should include:

- $\text{volume} = \text{length} \times \text{width} \times \text{height}$
- substituting values into formulae
- performing calculations accurately
- recording answers using cubic units

Examples may include:

- storage boxes, rooms, packages, tanks.

Learners should understand how volume calculations are used in everyday and workplace situations.

3: Know how to find the volume of a cube**AC 3.1 Identify the dimensions of a cube**

Learners should recognise the characteristics of a cube.

Content should include:

- identifying equal edges
- recognising cube dimensions
- comparing cubes with cuboids
- interpreting diagrams of cubes

Learners should understand that all edges of a cube are equal in length.

AC 3.2 Use the formula to calculate the volume of a cube

Learners should calculate cube volume using the appropriate formula.

Content should include:

- $\text{volume} = \text{side} \times \text{side} \times \text{side}$
- recognising repeated multiplication
- calculating cube volumes
- recording answers using cubic units
- checking calculations for accuracy

Examples may include:

- cubes constructed from unit cubes
- storage cubes
- cube-shaped packaging

Learners should understand the relationship between dimensions and resulting volume.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use 3D modelling software, online geometry tools and interactive volume calculators to explore cuboids and cubes.	• Practical investigations involving volume can develop confidence, logical thinking and problem-solving skills.	• Apply volume calculations to storage, packaging, moving house, construction projects, gardening, manufacturing, warehouse planning and selecting suitable containers.

UNIT SPECIFICATIONS

Unit Title: **Understanding and Using 2D Shapes**
Unit Reference Number: **K/617/6585**

Credit Value of Unit 1

GLH of Unit 10

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand the properties of shapes and measure angles.

This unit maps to the Adult Numeracy Core Curriculum in the following areas: MSS2/L1.1, MSS2/L1.2. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Understand the properties of 2D shapes	1.1 Use vocabulary related to shape
	1.2 Identify right angles
	1.3 Identify the properties of the sides or angles of 2D shapes
	1.4 Identify a line of symmetry
2 Be able to read and record angles in degrees	2.1 Read and record angles using the symbol for degrees
3 Be able to describe and measure and angles in degrees	3.1 Measure and record a variety of angles using a protractor
	3.2 Use angles to describe position
4 Be able to interpret plans, elevations and nets of 3D shapes	4.1 Interpret plans of simple 3D shapes
	4.2 Interpret elevations of simple 3D shapes
	4.3 Interpret nets of simple 3D shapes

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

2D shape, polygon, side, vertex, corner, angle, right angle, acute angle, obtuse angle, degree, degree symbol, °, protractor, symmetry, line of symmetry, regular, irregular, parallel, perpendicular, square, rectangle, triangle, circle, pentagon, hexagon, octagon, , net, three-dimensional, 3D, 2D, visualise, clockwise, anticlockwise, quarter turn, half turn, three-quarter turn, full turn, position, direction, geometry, equal sides, opposite sides, diagonal, parallelogram, trapezium, rhombus, inside, above, quadrilaterals, common number names to three hundred and sixty, cube, cuboid, pyramid, cylinder, prism

1: Understand the properties of 2D shapes

AC 1.1 Use vocabulary related to shape

Learners should develop confidence using appropriate mathematical vocabulary when describing shapes. Content should include:

- side
- corner
- angle
- edge
- equal sides
- equal angles
- opposite sides
- diagonal
- symmetry
- parallel
- acute angle
- obtuse angle
- reflex angle
- quadrilateral

Learners should describe common 2D shapes accurately using mathematical language.

Examples may include:

- squares
- rectangles
- triangles
- circles
- parallelogram
- trapezium
- rhombus
- pentagons
- hexagons
- octagon

Learners should become familiar with shape vocabulary encountered in practical and workplace situations.

AC 1.2 Identify right angles

Learners should recognise right angles in a range of contexts.

Content should include:

- recognising right angles visually
- identifying right angles in shapes
- recognising right angles in everyday objects

Examples may include:

- corners of books
- doors
- windows
- square and rectangular shapes
- identifying a labelled 90° angle as a right angle

Learners should understand that a right angle measures 90 degrees.

AC 1.3 Identify the properties of the sides or angles of 2D shapes

Learners should understand the characteristics of common 2D shapes.

Content should include:

- number of sides
- number of vertices
- equal sides
- parallel sides
- opposite sides
- right angles
- lines of symmetry

Shapes may include:

- square
- rectangle
- triangle
- circle
- rhombus
- parallelogram
- trapezium
- pentagon
- hexagon
- octagon

Learners should compare shapes using their properties and explain similarities and differences.

AC 1.4 Identify a line of symmetry

Learners should understand symmetry within two-dimensional shapes.

Content should include:

- identifying lines of symmetry
- drawing lines of symmetry
- recognising symmetrical and non-symmetrical shapes
- investigating symmetry in everyday objects

Examples may include:

- regular polygons
- letters
- logos
- patterns

Learners should recognise that some shapes have multiple lines of symmetry.

2: Be able to read and record angles in degrees

AC 2.1 Read and record angles using the symbol for degrees

Learners should understand that angles are measured in degrees.

Content should include:

- recognising the degree symbol ($^{\circ}$)
- reading angle measurements
- recording angles correctly interpreting angles shown on diagrams

Examples may include:

- 30° , 45° , 90° , 120° .

Learners should understand that degrees are the standard unit used to measure angles.

3: Be able to describe and measure angles in degrees

AC 3.1 Measure and record a variety of angles using a protractor

Learners should accurately measure angles using a protractor.

Content should include:

- positioning a protractor correctly
- reading scales accurately
- measuring acute angles to within 1°
- measuring right angles
- measuring obtuse angles to within 1°
- measuring reflex angles to within 1°

Learners should:

- record measurements correctly
- select the correct scale
- check measurements for reasonableness

Examples may include angles found in geometric shapes and practical situations.

AC 3.2 Use angles to describe position

Learners should understand how angles can be used to describe direction and position.

Content should include:

- clockwise and anticlockwise turns
- quarter turns
- half turns
- three-quarter turns
- full turns

Examples may include:

- maps
- navigation
- movement instructions
- directional diagrams

Learners should understand how angle measures relate to changes in direction.

4: Be able to interpret plans, elevations and nets of 3D shapes

AC 4.1 Interpret plans of simple 3D shapes

Learners should understand how two-dimensional plans represent three-dimensional objects.

Content should include:

- recognising shape layouts
- identifying dimensions
- visualising shapes from above or from the side

Examples may include:

- buildings
- simple design drawings
- containers
- common 3D shapes such as cuboid

Learners should understand that plans provide a top-down view of an object or space.

AC 4.2 Interpret elevations of simple 3D shapes

Learners should understand views of objects from specific directions.

Content should include:

- naming the 2D shape seen if an object is viewed from the front or side
- identifying shape features
- comparing different views

Examples may include:

- buildings
- containers
- simple structures
- common 3D shapes such as cylinder

Learners should begin developing the ability to visualise three-dimensional objects from two-dimensional representations.

AC 4.3 Interpret nets of simple 3D shapes

Learners should understand how nets relate to three-dimensional shapes.

Content should include:

- recognising nets of common 3D shapes such as cube, cuboid, cylinder, prism, pyramid
- identifying associated 3D shapes
- matching nets to solids
- visualising folded shapes

Examples may include nets of:

- cubes, cuboids, prisms, cylinder, pyramid.

Learners should understand how two-dimensional shapes combine to create three-dimensional objects.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use geometry software, digital drawing tools and interactive shape activities to investigate properties of shapes, angles, symmetry and nets. • Explore virtual modelling tools to visualise 3D objects.	• Shape and spatial reasoning activities can build confidence, improve problem-solving skills and encourage logical thinking. • Practical construction activities can promote engagement and creativity.	• Apply shape skills to construction, design, DIY projects, room layouts, packaging, engineering drawings, maps, navigation and planning activities.

UNIT SPECIFICATIONS

Unit Title: **Handling Data**

Unit Reference Number: **M/617/6586**

Credit Value of Unit 2

GLH of Unit 20

Level of Unit L1

Introduction

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

This unit maps to the Adult Numeracy Core Curriculum in the following areas: HD1/L1.1, HD1/L1.2. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Be able to represent discrete data	1.1 Implement methods for collecting data
	1.2 Represent discrete data in tables
	1.3 Represent discrete data in pie charts
	1.4 Represent discrete data in bar charts
	1.5 Represent discrete data in line graphs
2 Be able to group and graphically represent discrete data	2.1 Organise and group discrete data
	2.2 Represent grouped data in bar charts
	2.3 Represent grouped data in line graphs
	2.4 Represent grouped data in pie charts

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

data, information, category, frequency, tally, survey, questionnaire, observation, table, chart, graph, bar chart, line graph, pie chart, tally chart, axis, scale, interval, label, plot, coordinate, trend, pattern, compare, interpret, represent, collect, record, statistics, results, angle, °.

1: Be able to represent discrete data

AC 1.1 Implement methods for collecting data

Learners should understand how data can be collected in a systematic and organised way.

Content should include:

- questionnaires
- surveys
- observation
- counting and recording
- tally charts
- data collection sheets

Learners should:

- identify suitable methods of collection
- organise collected information appropriately

Examples may include:

- favourite foods
- travel methods
- attendance data
- workplace information

Learners should recognise that accurate data collection supports reliable conclusions.

AC 1.2 Represent discrete data in tables

Learners should organise data clearly within tables.

Content should include:

- creating simple tables
- entering data accurately ideally using 5 bar gate in tallies but 5 individual tallies is also permitted.
- labelling rows and columns
- checking completeness of records

Examples may include:

- survey results
- inventory records
- attendance figures
- customer information

Learners should understand how tables provide an organised method of presenting information.

AC 1.3 Represent discrete data in pie charts

Learners should understand how pie charts visually represent proportions within a dataset.

Content should include:

- interpreting sectors
- calculating the required angle using a non-scientific calculator
- creating simple pie charts using a protractor correctly to within 1-2°
- labelling categories appropriately

Examples may include:

- survey outcomes
- spending categories
- product preferences

Learners should understand that pie charts are most effective when showing parts of a whole.

AC 1.4 Represent discrete data in bar charts

Learners should present data using bar charts.

Content should include:

- constructing bar charts
- selecting suitable scales
- labelling axes
- plotting values accurately
- creating a suitable title

Examples may include:

- sales information
- survey responses
- attendance figures
- production data

Learners should understand how bar charts enable comparisons between categories.

AC 1.5 Represent discrete data in line graphs

Learners should represent data using line graphs where appropriate.

Content should include:

- plotting coordinates accurately
- joining data points appropriately
- selecting suitable scales
- labelling axes correctly
- creating a suitable title

Examples may include:

- temperature changes
- sales over time
- attendance trends
- production figures

Learners should understand that line graphs are useful for showing changes over time.

2: Be able to group and graphically represent discrete data

AC 2.1 Organise and group discrete data

Learners should organise larger datasets into meaningful groups.

Content should include:

- grouping values into categories
- organising information systematically
- identifying suitable class intervals avoiding overlaps
- sorting and classifying information
- preparing data for graphical representation

Examples may include:

- age groups
- spending bands
- test scores
- time intervals

Learners should understand how grouping data can make interpretation easier.

AC 2.2 Represent grouped data in bar charts

Learners should create bar charts using grouped categories.

Content should include:

- selecting suitable groupings
- constructing grouped bar charts
- presenting information clearly

Examples may include:

- grouped survey results
- grouped customer data
- grouped performance information

Learners should develop confidence presenting larger datasets visually.

AC 2.3 Represent grouped data in line graphs

Learners should display grouped datasets using line graphs where appropriate.

Content should include:

- plotting grouped information accurately
- selecting appropriate scales

Examples may include:

- population changes
- sales trends
- attendance patterns

Learners should understand the importance of presenting grouped information clearly.

AC 2.4 Represent grouped data in pie charts

Learners should represent grouped information using pie charts.

Content should include:

- calculating proportions where appropriate
- constructing pie charts using a protractor correctly to within 1-2°
- identifying dominant and smaller groups

Examples may include:

- spending categories
- survey outcomes
- workplace statistics

Learners should understand how pie charts can communicate proportions effectively.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use spreadsheets, online survey tools and graphical software to collect, organise and present data. • Experiment with different chart types to compare effectiveness.	• Interpreting data can improve decision-making and confidence when evaluating information presented in everyday life. • Learners can develop critical thinking through analysing evidence and identifying patterns.	• Apply data handling skills to budgeting, shopping comparisons, workplace reporting, survey interpretation, attendance tracking, fitness monitoring and understanding information presented in the media.

UNIT SPECIFICATIONS

Unit Title: **Data Calculations**

Unit Reference Number: **K/503/3044**

Credit Value of Unit 1

GLH of Unit 10

Level of Unit L1

Introduction

This unit will give learners an opportunity to calculate arithmetical averages and the range of a set of data.

This unit maps to the Adult Numeracy Core Curriculum in the following areas: HD1/L1.3, HD1/L1.4. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes		Assessment Criteria	
The learner will		The learner can	
1	Understand the arithmetical average for a set of data	1.1	Use the term 'average' in everyday contexts
		1.2	Find the mean for a given set of data
2	Understand the range of a set of data	2.1	Use the term 'range' as a measure of spread for sets of data in everyday usage
		2.2	Calculate the range of given data sets

Indicative Content

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

data, dataset, average, mean, range, highest value, lowest value, total, sum, divide, calculation, statistics, spread, , compare, interpret, value, frequency, result, estimate, information, trend, conclusion, , , calculation, accuracy, table, chart, graph, mean average,

1: Understand the arithmetical average for a set of data

AC 1.1 Use the term 'average' in everyday contexts

Learners should understand that the **mean** is one type of average and is commonly used to describe a typical value within a set of data.

Content should include:

- understanding that average is a general term used to summarise data
- recognising that the mean is the average calculated by adding all values and dividing by the number of values
- interpreting average (mean) values presented in reports, charts and media
- recognising situations where averages (means) are used to compare information
- discussing how averages can support decision-making

Examples may include:

- average (mean) temperature
- average (mean) attendance
- average (mean) spending
- average (mean) test scores
- average (mean) wages

Learners should understand that averages help to summarise large amounts of information using a single representative value and that, within this unit, the term **average refers to the mean**.

AC 1.2 Find the mean for a given set of data

Learners should calculate the mean as a measure of average.

Content should include:

- adding values within a dataset
- counting the number of values
- dividing the total by the number of values
- checking calculations for accuracy
- interpreting the resulting mean

Examples may include:

- test scores
- sales figures
- temperatures
- ages
- attendance figures
- production outputs

Learners should understand that the mean is calculated by:

Mean = Total of all values ÷ Number of values

Learners should also recognise when a calculated mean is reasonable in relation to the original dataset.

2: Understand the range of a set of data

AC 2.1 Use the term 'range' as a measure of spread for sets of data in everyday usage

Learners should understand that the range measures how spread out data values are.

Content should include:

- understanding the term range
- interpreting range values
- comparing datasets using range
- discussing variation within data

Examples may include:

- daily temperatures
- travel times
- product prices
- wages
- performance results

Learners should understand that two datasets may have similar averages but different ranges.

AC 2.2 Calculate the range of given data sets

Learners should calculate range accurately from a variety of datasets.

Content should include:

- identifying the highest value
- identifying the lowest value
- subtracting the lowest value from the highest value
- checking calculations
- interpreting results

Examples may include:

- scores in assessments
- temperatures over a week
- prices of products
- attendance figures
- distances travelled

Learners should:

- understand that $\text{Range} = \text{Highest value} - \text{Lowest value}$
- know which value is most or least
- be able to calculate how much more one value is than another

Learners should begin to use range to compare the variability of different sets of data.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use spreadsheets and data analysis software to calculate averages and ranges automatically. • Explore charts and graphs that display data trends and comparisons.	• Understanding averages and ranges can help learners interpret information more confidently and make informed decisions based on evidence rather than assumptions.	• Apply averages and ranges to budgeting, monitoring spending, comparing prices, analysing travel times, evaluating performance data and interpreting reports encountered in everyday life and work.

UNIT SPECIFICATIONS

Unit Title: **Probability**

Unit Reference Number: **Y/503/3282**

Credit Value of Unit 1

GLH of Unit 10

Level of Unit L1

Introduction

This unit will give learners an opportunity to understand and calculate probability. This unit assumes that the learner has prior skills in using decimals and percentages at Level 1. These skills may have been gained through the achievement of the Ascentis Understanding and Using Decimals and the Understanding and Using Percentages units at Level 1 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/L1.1, HD2/L1.2. The unit reflects the requirements of the reformed Functional Skills qualifications.

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

Learning Outcomes	Assessment Criteria
The learner will	The learner can
1 Understand probability as an expression of an event occurring	1.1 Identify what is meant by expressions such as 'one in two chance', 'impossible' and 'certain'
	1.2 Use probabilities to compare the likelihood of events
2 Understand that probability can be written as a fraction, decimal or percentage	2.1 Express the probability of events occurring as fractions (including simplified form), decimals or percentages
	2.2 Express the probability of an event as the number of ways the event can happen divided by the total number of outcomes
3 Be able to calculate probability	3.1 Calculate probabilities from given sets of data

Please be aware that the indicative content supplied below is a suggested guide only.

Key Mathematical Vocabulary

probability, chance, likelihood, impossible, unlikely, even chance, likely, certain, outcome possible outcome, probability scale, fraction, decimal, percentage, equivalent, simplify, frequency, data, experiment, calculate, random, fifty-fifty, one in two chance. one in three chance. one in four chance and one in five chance.

1: Understand probability as an expression of an event occurring

AC 1.1 Identify what is meant by expressions such as 'one in two chance', 'impossible' and 'certain'

Learners should understand that probability describes how likely an event is to occur.

Content should include:

- impossible events
- unlikely or likely events
- even chance events
- certain events
- probability language used in everyday situations

Examples may include:

- rolling a 7 on a standard six-sided dice is impossible
- tossing a coin and getting heads has a one in two chance
- the sun rising tomorrow is certain

Learners should place events on a probability scale and compare their likelihood.

Learners should recognise that probability can be used to support decision-making and predictions.

AC 1.2 Use probabilities to compare the likelihood of events

Learners should compare events and determine which is more or less likely to occur.

Content should include:

- interpreting probability statements
- comparing likelihoods
- ordering events by probability
- identifying equally likely outcomes
- explaining probability using mathematical language

Examples may include:

- comparing weather forecasts
- comparing practical everyday events

Learners should understand that events with higher probabilities are more likely to occur.

2: Understand that probability can be written as a fraction, decimal or percentage

AC 2.1 Express the probability of events occurring as fractions (including simplified form), decimals or percentages

Learners should understand that probabilities can be represented in equivalent forms.

Content should include:

- expressing probability as a fraction
- simplifying fractions
- converting fractions to decimals or percentages
- recognising equivalent values

Examples may include:

- $\frac{1}{2} = 0.5 = 50\%$
- $\frac{1}{4} = 0.25 = 25\%$
- $\frac{3}{4} = 0.75 = 75\%$
- $\frac{3}{10} = 0.3 = 30\%$

Learners should understand that different representations communicate the same probability value.

AC 2.2 Express the probability of an event as the number of ways the event can happen divided by the total number of outcomes

Learners should understand the basic probability formula.

Content should include:

- favourable outcomes
- total possible outcomes
- calculating simple probabilities
- interpreting probability calculations
- solving practical probability problems

Learners should understand that:

Probability = Number of favourable outcomes ÷ Total number of possible outcomes

Examples may include:

- selecting coloured counters from a bag
- rolling dice
- spinning spinners
- choosing items from a set

Learners should recognise that probability values range between 0 and 1.

3: Be able to calculate probability

AC 3.1 Calculate probabilities from given sets of data

Learners should calculate probabilities using information presented in tables, lists and datasets.

Content should include:

- identifying favourable outcomes
- calculating probabilities from frequencies
- expressing answers as fractions, decimals and percentages
- comparing calculated probabilities
- interpreting probability values in context

Examples may include:

- survey results
- attendance records
- production data
- quality control information
- results from experiments

Learners should understand that probability can be derived from observed data as well as theoretical situations.

Learners should identify whether calculated probabilities suggest events are likely, unlikely or equally likely.

Suggested Opportunities to Develop Wider Awareness, Learning and Skills

Digital	Well-being	Everyday Life Skills
• Use spreadsheets, online simulations and probability generators to investigate chance events and compare experimental and theoretical probability. • Explore digital surveys and datasets to calculate probabilities.	• Understanding probability can help learners make informed decisions, evaluate risk and interpret information more confidently. It encourages logical thinking and critical evaluation of claims and predictions.	• Apply probability skills to weather forecasts, risk assessments, games, sports statistics, insurance information, surveys, quality control processes and decision-making in everyday life and work.

APPENDIX 1

Summary Record of Achievement

Level 1 Award/Extended Award/Certificate in Mathematics (Stepping Stones to Functional Skills)

Learner Name _____

Unit Title	Level	Credit Value	Date completed	Assessor Signature	Internal Verifier Signature (if sampled)
Understanding Numbers	1	2			
Using Calculations: Addition and Subtraction of Whole Numbers	1	1			
Using Calculations: Multiplication and Division of Whole Numbers	1	2			
Understanding and Using Fractions	1	2			
Understanding and Using Decimals	1	2			
Understanding and Using Percentages	1	2			
Measure: Time	1	2			
Understanding Length, Weight and Capacity	1	1			
Understanding Perimeter and Area	1	1			
Understanding Volume	1	1			
Understanding and Using 2D Shapes	1	1			
Handling Data	1	2			
Data Calculations	1	1			
Probability	1	1			

Minimum Credit Value of Qualification _____

Assessor Signature _____

Internal Verifier Signature (if sampled) _____