

**Assessment Guidance &
Sample Assessment Activities**

Suite of Mathematics Qualifications

Entry 1, Entry 2, Entry 3, Level 1, Level 2

Version 4.0

(April 2019)

About the Assessment Guidance and Sample Activities

The Assessment Guidance and Sample Activities are intended for tutors, assessors, internal quality assurers, centre quality managers and other staff within Gateway Qualifications recognised centres and/or prospective centres.

The document provides guidance on how to assess, developing a portfolio, completing a logbook and includes unit specific sample activities and contexts.

The guide should be read in conjunction with the Qualification Specification, Gateway Qualifications Centre Handbook and other publications available on the website which contain more detailed guidance on assessment and quality assurance practice.

In order to offer this qualification you must be Gateway Qualifications recognised centre.

If your centre is not yet recognised, please contact our Development Team to discuss becoming Gateway Qualifications Recognised Centre:

Telephone: 01206 911211

Email: enquiries@gatewayqualifications.org.uk

Website: <https://www.gatewayqualifications.org.uk/advice-guidance/delivering-our-qualifications/become-recognised-centre/>

Contents

1. Introduction	5
1.1 About the qualifications	5
1.2 Units	5
1.3 Initial assessment and induction	6
2. Delivery	7
2.1 Learning programmes	7
2.2 Teaching and learning	7
3. Assessment	9
3.1 Role of the assessor	9
3.2 Assessment	9
3.3 Building a portfolio	10
3.4 Using the Learner Assessment Tracking forms	11
3.5 Sample Learner Assessment Tracking form	12
Entry 3: Using and communicating data	12
4. Unit guidance	15
4.1 Introduction	15
4.2 Units with sample assessment activities and contexts	16
Entry 1: Adding and Subtracting	16
Entry 1: Money and Time	17
Entry 1: Using and Communicating Data	18
Entry 1: Using Size, Shape and Space	19
Entry 1: Using Whole Numbers	20
Entry 2: Addition, Subtraction and Multiplication	22
Entry 2: Money, Time and Temperature	24
Entry 2: Using Size, Shape and Measure	27
Entry 2: Using Whole Numbers and Fractions	29
Entry 3: Money, Time and Temperature	32
Entry 3: Using and Communicating Data	34
Entry 3: Using Size, Shape and Measures	36
Entry 3: Using Whole Numbers, Decimals, Fractions and Percentages	39
Level 1: Making Calculations	41
Level 1: Money, Time and Temperature	43
Level 1: Numbers, Decimals, Fractions and Percentages	45
Level 1: Numerical Relationships, Algebra and Ratios	47
Level 1: Using and Communicating Data	49
Level 1: Using Probability	51
Level 1: Using Size, Shape and Space	52

Level 2: Making Calculations	54
Level 2: Money, Time and Temperature	56
Level 2: Numbers, Decimals, Fractions and Percentages.....	58
Level 2: Numerical Relationships, Algebra and Ratio	60
Level 2: Using and Communicating Data.....	62
Level 2: Using Probability	64
Level 2: Using Size, Shape and Space.....	65
5. Gateway Qualifications	68
6. Appendices	69
Appendix 1 Gateway Qualifications Mathematics units – referenced to the Adult Numeracy Core Curriculum Entry 1-3	69
Appendix 2 Gateway Qualifications Mathematics units – referenced to the Adult Numeracy Core Curriculum Levels 1 -2	71
Appendix 3: Mathematics Mapping to the Adult Numeracy Core Curriculum Entry 1-3, Levels 1-2 and Functional Skills.....	73

1. Introduction

1.1 About the qualifications

The Gateway Qualifications Awards/Certificates in Mathematics have been developed to recognise and reward progress and improve levels of numeracy among adults and young people. They provide learners with a flexible approach to developing and demonstrating the skills in Mathematics which will enable them to build confidence and provide a foundation for further study towards a GCSE A*-C in Mathematics, a Functional Skill in Mathematics at levels 1 or 2 to support progression into employment or higher level study.

The Mathematics qualifications cover:

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

The qualifications are built by combining an appropriate blend of units which meet the needs of the learner. The suite of qualifications is available at entry 1, entry 2, entry 3, level 1 and level 2 and includes:

- Single Unit Awards - that focus on an aspect of a curriculum area
- Certificate in Mathematics that encompass all the curriculum areas

All units are assessed through a portfolio of evidence.

1.2 Units

There are 29 units available in the Mathematics suite. The units align to the National Standards for Adult Numeracy and have been mapped to the Adult Numeracy Core Curriculum and the Functional Skills subject criteria. Where appropriate, they are also signposted to the GCSE grade descriptors for Mathematics.

The list of available units is as follows:

Unit Number	Unit Title	Level	Guided Learning	Credit Value
A/505/4853	Adding and Subtracting	Entry 1	30	3
F/505/4854	Money and Time	Entry 1	30	3
L/505/4856	Using and Communicating Data	Entry 1	30	3
J/505/4855	Using Size, Shape and Space	Entry 1	30	3
T/505/4852	Using Whole Numbers	Entry 1	20	2
Y/505/4861	Addition, Subtraction and Multiplication	Entry 2	30	3
Y/505/4858	Money, Time and Temperature	Entry 2	30	3
R/505/4860	Using and Communicating Data	Entry 2	30	3
D/505/4859	Using Size, Shape and Measure	Entry 2	30	3
R/505/4857	Using Whole Numbers and Fractions	Entry 2	20	2
K/505/4864	Making Calculations	Entry 3	30	3
D/505/4862	Money, Time and Temperature	Entry 3	30	3
H/505/4863	Using and Communicating Data	Entry 3	30	3

Unit Number	Unit Title	Level	Guided Learning	Credit Value
M/505/4865	Using Size, Shape and Measures	Entry 3	30	3
T/505/4866	Using Whole Numbers, Decimals, Fractions and Percentages	Entry 3	20	2
F/505/4868	Making Calculations	Level 1	30	3
M/505/4887	Money, Time and Temperature	Level 1	30	3
A/505/4867	Number, Decimals, Fractions and Percentages	Level 1	30	3
J/505/4869	Numerical Relationships, Algebra and Ratios	Level 1	20	2
J/505/4872	Using and Communicating Data	Level 1	30	3
A/505/4870	Using Probability	Level 1	20	2
L/505/4890	Using Size, Shape and Space	Level 1	30	3
Y/505/4875	Making Calculations	Level 2	30	3
D/505/4876	Money, Time and Temperature	Level 2	30	3
H/505/4877	Numbers, Decimals, Fractions and Percentages	Level 2	30	3
K/505/4878	Numerical Relationships, Algebra and Ratio	Level 2	20	2
M/505/4879	Using and Communicating Data	Level 2	30	3
H/505/4880	Using Probability	Level 2	20	2
K/505/4881	Using Size, Shape and Space	Level 2	30	3
A/505/4853	Adding and Subtracting	Entry 1	30	3
F/505/4854	Money and Time	Entry 1	30	3
L/505/4856	Using and Communicating Data	Entry 1	30	3
J/505/4855	Using Size, Shape and Space	Entry 1	30	3
T/505/4852	Using Whole Numbers	Entry 1	20	2

1.3 Initial assessment and induction

Before the start of their course or programme, it is important to ensure that learners are working at the correct level and that they are clear about the requirements of each unit they are working towards. Initial diagnostic assessment, involving learners themselves in the process, can ensure that their needs are going to be met and that the appropriate skills will be developed.

An induction programme can support learners awareness of:

- the units/qualifications they will be working towards
- how these units/qualifications can develop particular skills
- the requirements of the units/qualifications
- their responsibilities as a learner
- how to maintain a portfolio
- the responsibilities of the centre and how they will be supported
- how the unit/units fit in with other areas of their learning or employment as appropriate
- possible progression routes on completion of the programme.

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

2. Delivery

2.1 Learning programmes

Learning programmes should ensure that for every learner there is an opportunity for progression and that learning is contextualised in a way that is appropriate to the learner's background, needs and aspirations.

In developing learning programmes, centres should consider the following:

- Learners should have opportunities to apply their Mathematics skills in more than one context, for example in a work or training context as well as everyday home, family, community or leisure contexts.
- Programmes should allow for learners to integrate their Mathematics skills so that activities can provide evidence for more than one unit. In real life situations for example when shopping learners are likely to use a variety of mathematical calculations to solve problems with prices and money, as well as size, shape and measure.
- Integrating the Mathematics units within programmes for different training sectors and employment settings ensures that activities are relevant to learners and support progression in both their Mathematics skills and their sector specific or employment skills. For example, a programme for learners developing Mathematics skills in a hospitality context might cover areas such as working out costs of a menu, working out proportions of ingredients.
- Centres should draw as widely as possible on resources both within and outside the centre. Learners' motivation can be maintained by learning materials which are themed and relevant to each learner's interest.
- The introduction of some specialised vocabulary can support the chosen context and make the general Mathematics skills more relevant.
- Learning programmes can also make innovative and effective use of ICT including relevant online resources allowing learning at different levels which supports learner independence. Using resources such as video conferencing, e-networking and links with other partners allows learners to have contact with, for example employers, other learners and can also allow for learners to develop projects using a variety of media.

2.2 Teaching and learning

The units are designed to allow choice and flexibility and to encourage active learning. Teaching and learning activities should be based on the maturity and needs of the learners and their stage in the programme. At the start of a programme, it is usual that learners will need more guidance on how to meet the requirements and some will require further support to overcome specific learning difficulties.

For learning to be effective in developing learners' Mathematics skills and supporting their progression, it is important that learning activities are both realistic and challenging. In planning for effective teaching and learning through the Mathematics units, centres should consider the following:

- teaching and practice of learning strategies within different contexts
- structuring tasks that are of sufficient challenge to stretch, but not deter, the learners

- involving learners in planning activities and the success criteria to achieve them
- developing activities which allow learners to use different mathematical skills such as combining solving problems with different kinds of calculations or a handling data activity which provides evidence for other mathematical operations
- the provision of a variety of learning activities with a clear purpose, relevant to learners
- developing activities that allow learners to apply and practice their skills in different contexts
- encouraging creativity so that learners can adapt and re-use their skills for new purposes and in new contexts and can try out alternatives or find new solutions
- creating opportunities to work with others in groups and pairs to develop their learning and as well as teamwork
- providing clear feedback so that learners know how well they are doing and what they need to do to improve
- developing opportunities for self-assessment and reflection on their learning and thinking.

Additional guidance and support

A wealth of guidance on planning the curriculum and teaching and learning activities can be found at:

Adult Numeracy core curriculum

including glossary of terms (pdf version)

<http://rwp.excellencegateway.org.uk/resource/Adult+numeracy+core+curriculum/pdf/>

Adult Numeracy core curriculum

Online version with 2007 revisions and additional guidance for planning, teaching and learning

<http://www.excellencegateway.org.uk/node/1514>

Numeracy progression overview

<http://repository.excellencegateway.org.uk/fedora/objects/import-pdf:9468/datastreams/PDF/content>

3. Assessment

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

3.1 Role of the assessor

The assessor is responsible for judging the learners' evidence against the assessment requirements. Assessors help learners identify opportunities for assessment and can provide guidance on the nature of evidence that can be produced. It is possible that a learner may have more than one assessor, each assessing different units or aspects of units.

The assessor is responsible for:

- managing the assessment process
- agreeing, recording and reviewing assessment plans with the learner
- judging the evidence against the assessment requirements
- using appropriate assessment methods
- ensuring that assessments are fair
- recording the assessment process and all assessment outcomes
- providing feedback to the learner following each assessment
- passing all assessment records, with recorded outcomes, to the internal quality assurer or the internal quality assurer
- maintaining own subject specialist knowledge and competence
- contributing to the evaluation of the assessment process
- contributing to standardisation meetings.

3.2 Assessment

Planning

Effective planning for assessment by the learner and their assessor is essential if the learner is to succeed within an appropriate timescale. The purpose of assessment planning is to help learners identify how and when they will provide the evidence required to demonstrate their competence. Planning should be a joint activity between the learner and assessor and should include:

- agreements about the learning activities to be created/used in the learning programme
- an outline of the settings in the programme which prove the most appropriate contexts for assessment
- identifying assessment opportunities in other settings or subject areas
- the method of assessment that will be undertaken
- the type of evidence to be collected and how to reference it
- identifying others who need to be informed of or involved in the planned assessment
- opportunities to review each assessment.

When planning assessments, the assessor should aim to identify opportunities for holistic assessment, that is, to assess across elements of a unit, a full unit or clusters of units. They should also include on-going and continuous assessment as appropriate.

Preparation

Before starting work towards the qualification, learners will need support and guidance to enable them to know:

- which units and which route through the qualification is best suited to their needs
- what the selected units cover
- what will be required of them
- what is involved in the assessment process and identify the people who will be involved
- how to identify and reference suitable evidence
- how to compile their portfolio of evidence
- any alternative assessment arrangements
- what support they can access during the learning and assessment process.

Marking

When marking assessments, assessors should consider whether evidence is:

- Valid – Does the evidence demonstrate what is claimed and meet the minimum assessment requirement?
- Authentic – Is evidence the real work of the learner?
- Sufficient – Does the evidence cover all of the assessment criteria? Is the evidence of an appropriate quality? Does it cover more than one context?
- Reliable and consistent across contexts and with the work of other learners –

Feedback

Feedback should be provided to learners following an assessment. Feedback should support learners to improve the quality of their work. This is an important part of the assessment process and should be provided whether the learner has been successful or unsuccessful in meeting the assessment criteria.

3.3 Building a portfolio

The term portfolio is used to describe the organised collection of a learner's evidence for assessment. Centres will need to provide considerable guidance and support to help learners produce/gather evidence as appropriate, particularly at lower levels.

During induction, learners should be made aware of the process of building a portfolio of evidence, and any related documentation. Even where tutors are largely responsible for the process, learner involvement in their own assessment can have a positive impact on their achievement.

As well as the evidence, the portfolio must contain full learner details and those of other people involved in the assessment process.

The learner owns the portfolio throughout the assessment and quality assurance process and after certification. Assessors may review the portfolio at the centre following an

assessment, returning it later to the learner. It will be held at the centre for internal quality assurance purposes.

To safeguard portfolios and remove the risk of them becoming mislaid, centres should consider a system of portfolio management during the assessment and quality assurance process.

3.4 Using the Learner Assessment Tracking forms

Gateway Qualifications has developed a separate Learner Assessment Tracking document for this suite of qualifications. It contains evidence recording sheets. Gateway Qualifications also provides sample feedback sheets and forms to record observations available to download via www.gatewayqualifications.org.uk.

The Learner Assessment Tracking forms will help learners work towards the unit(s) or qualification they are aiming to achieve. Centres may develop and use an alternative logbook, but it must include all the information required in the Learner Assessment Tracking forms.

The example below shows how a Learning Assessment Tracking form could be completed for a single unit.

For each criterion where the evidence can be located is identified by:

- the kind of evidence e.g. witness statement handwritten letter, word processed form, reading log etc.
- a portfolio reference e.g. N1, N2, Mss 2 Hd1, Hd2
- a brief title

This system for identifying evidence is an example and centres may use their own systems, however any system must be clear for external quality assurance.

The sample evidence shows how assessment criteria can be grouped within the same activity and that some criteria are evidenced more than the minimum number of times because of their more general qualitative nature e.g. *Make observations about results* is likely to be evidenced in a number of activities.

3.5 Sample Learner Assessment Tracking form

Entry 3: Using and communicating data

Unit code	H/505/4863
Credit value	3
GLH	30
Aim	

Learner name and number	
--------------------------------	--

Criteria to be met on more than one occasion in different contexts

Criteria to be met:	Evidence location	Tutor signature	IQA signature
1. Be able to extract information.			
1.1 Extract numerical information from lists, tables, diagrams, bar and tally charts.	<i>Portfolio - Tv listings info Hd1</i> <i>Portfolio - info from stationary requirement tally chart Hd2</i>	BHarris	JMoore
1.2 Make numerical comparisons from bar charts and pictograms.	<i>Portfolio - Weather charts Hd3</i> <i>Portfolio - healthy eating ingredients info - Hd4</i>	BHarris	JMoore
2. Be able to collect and record information			
2.1 Select categories before collecting data.	<i>Portfolio - Tv survey Hd1</i> <i>Portfolio -survey snacks Hd4</i>	BHarris	JMoore
2.2 Collect data in familiar situations.	<i>Portfolio - Tv survey feedback Hd1</i> <i>Portfolio -survey snacks Hd4</i>	BHarris	JMoore
2.3 Record numerical data using a tally.	<i>Portfolio - Tv survey record Hd1</i> <i>Portfolio -survey snacks record Hd4</i>	BHarris	JMoore
2.4 Make observations about results.	<i>Portfolio - Discussion - TV-with tutor Hd1</i> <i>Portfolio - Discussion - snacks with tutor Hd4</i>	BHarris	JMoore

	<i>Portfolio - write up of weather charts Hd3</i>		
3. Be able to organise and present information so it makes sense to others			
3.1 Use whole numbers, decimals and common fractions to present results.	<i>Portfolio - Tv results Hd1</i> <i>Portfolio -snacks results Hd4</i> <i>Portfolio - representation stationary Hd2</i>	BHarris	JMoore
3.2 Present data in tables, charts and diagrams, using key elements appropriately.	<i>Portfolio - Tv survey chart record Hd1</i> <i>Portfolio - snack survey table record Hd4</i>	BHarris	JMoore
3.3 Use a simple scale to represent data in a bar chart or pictogram.	<i>Portfolio - Tv survey chart record Hd1</i> <i>Portfolio - own weather bar chart Hd3</i>	BHarris	JMoore
3.4 Provide simple descriptions of outcomes.	<i>Portfolio - Discussion with tutor-TV- Hd1</i> <i>Portfolio - Discussion with tutor - snacks Hd4</i> <i>Portfolio - Discussion with tutor - weather bar chart Hd3</i>	BHarris	JMoore

Learner's Declaration:

I certify that the work submitted for this Portfolio is my own.

NameFred Smith

Signed:..... F Smith

Date: 31/1/2018

Assessor feedback on unit:

The evidence presented was well organised and has met the criteria.

Assessor's Declaration:

I certify that the learner named above completed the work submitted to the required standard.

Name Bernadette Morris **Signed:**.....*B Morris*..... **Date:** 13/2/2018

Internal Quality Assurer's Declaration:

I can confirm the unit has been sampled and can confirm the unit is complete to the required standard.

Name John Moore **Signed:**.....*J Moore*..... **Date:** 20/2/2019

4. Unit guidance

4.1 Introduction

This section of the assessment pack provides guidance to support those working with and/or assessing the Mathematics units. Each unit has:

- Gateway Qualifications unit title and number
- Level
- Unit credit value
- Recommended guided learning hours
- Unit aim
- Learning outcomes with related assessment criteria
- Additional information
- Sample activities/contexts

The **additional information** column provides the reference to the Adult Numeracy Core Curriculum statements where further clarification for teaching and learning can be found and further guidance on assessment for individual assessment criteria as appropriate.

Sample activities/contexts contain a variety of activities and contexts that centres might use or adapt as teaching, learning and assessment activities. They include examples from everyday life, leisure, community, family, training and employment. Centres can adapt these and combine them to provide meaningful and relevant tasks. The examples are provided to support centres in devising tasks to meet the needs of their learners. A single activity can provide evidence for different criteria and learning outcomes. Activities can also be combined across units to provide linked assessment across curriculum areas. The sample activities are not intended to be either exclusive or prescriptive.

Evidence requirements

Learners are required to provide evidence for each assessment criterion in more than one context. This ensures that, for example, a learner can demonstrate Mathematics skills in an everyday home context and an employment context.

4.2 Units with sample assessment activities and contexts

Entry 1: Adding and Subtracting

Unit code	A/505/4853
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will manipulate, add and subtract numbers up to 10 in order to use and understand numbers in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to add whole numbers.	3.1 Add single-digit numbers with totals to 10. 3.2 Interpret + and =. 3.3 Use related vocabulary, for example <i>and</i> , <i>plus</i> , <i>equals</i> .	N1/E1.2 N1/E1.4 N1/E1.6
2. Be able to subtract whole numbers.	2.1 Subtract single-digit numbers from numbers up to 10. 2.2 Interpret - and =. 2.3 Use related vocabulary, for example <i>take away</i> , <i>minus</i> , <i>equals</i> .	N1/E1.2 N1/E1.5 N1/E1.6
3. Be able to solve everyday problems with and without a calculator.	3.1 Identify and Interpret symbols +, -, = in practical situations. 3.2 Estimate number of items (up to 10). 3.3 Be able to use primary functions of a calculator.	N1/E1.2 N1/E1.6 N1/E1.7

Sample activities/contexts

- Calculate totals e.g. items in a full box of five plus three packs on the shelf, numbers of food items in packs e.g. four plus four apples.
- Calculate additions of coins in pounds or pennies
- Work out the shortfall in numbers, e.g. eggs for a recipe, plants to fill a display tray, cups to serve visitors.
- Estimate how many pens on the desk
- Identify and compare the symbols +, - and = on simple hand-held and on-screen calculators, and on computer keyboards and mobile phones
- Use + and – to solve practical problems, e.g. number of extra chairs needed at the table at break time.

Entry 1: Money and Time

Unit code	F/505/4854
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about common measures of time and money in order to use and understand them in everyday situations.

This unit has 2 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Know about money.	1.1 Recognise and select different coins. 1.2 Recognise and select different notes. 1.3 Identify prices expressed in whole numbers up to 10.	MSS1/E1.1
2. Know about time.	2.1 Relate familiar events to different times, days, seasons. 2.2 Demonstrate understanding of and use vocabulary related to time.	MSS1/E1.2

Sample activities/contexts

- Choose coins or notes for payment in a machine such as a drinks machine or ticket machine.
- Count out coins or notes to make a purchase.
- Arrange day and time for a delivery, to meet friends.
- Understand when training sessions take place.
- Discuss in which season different festivals take place.
- Mark events on a planner.

Entry 1: Using and Communicating Data

Unit code	L/505/4856
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn how to understand mathematical information and present results for use in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to extract information.	1.1 Identify simple numerical information from a list.	HD1/E1.1
2. Be able to sort and classify objects.	2.1 Identify criteria to sort familiar objects. 2.2 Sort and classify objects using a single criterion. 2.3 Make simple lists.	HD1/E1.2
3. Be able to present results.	3.1 Use objects, simple images or whole numbers to present results. 3.2 Use basic terms when identifying outcomes.	HD1/E1.3

Sample activities/contexts

- Identify phone numbers from a list such as a contacts list on a mobile phone or from a webpage.
- Find quantities on a shopping list.
- Find own room number from a list.
- Select items from an on-screen menu.
- Sort items for recycling.
- Sort clothes for different people/purposes.
- Present results of a simple survey e.g. who smokes, likes and dislikes for a social event.
- Sort food for storage, e.g. items for the fridge.

Entry 1: Using Size, Shape and Space

Unit code	J/505/4855
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about size, shape and related common measures for use in everyday situations.

This unit has 2 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Know about size and weight.	1.1 Use simple terms to describe size. 1.2 Use simple terms to describe dimensions. 1.3 Use simple terms to describe weight. 1.4 Use simple terms to describe capacity. 1.5 Use direct comparisons for size weight and dimensions.	MSS1/E1.3 MSS1/E1.4 MSS1/E1.5 MSS1/E1.6
2. Know about shape, positional vocabulary and space.	2.1 Identify common 2-D and 3-D shapes. 2.2 Follow directions using everyday positional vocabulary, for example, <i>between, inside, near to</i> .	MSS2/E1.1 MSS2/E1.2

Sample activities/contexts

- When packing a shopping bag put heaviest goods at the bottom
- Select a suitable container for filling with water.
- Use judgement of size when storing or packing.
- Discuss size and items in a room.
- Follow directions in order to find or put away equipment.
- Recognise the shape of traffic signs and what they mean.

Entry 1: Using Whole Numbers

Unit code	T/505/4852
Credit value	2
GLH	20
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will secure numbers up to 10 in order to understand numbers in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to count and order whole numbers up to 10.	1.1. Count reliably up to ten items. 1.2. Order numbers up to ten. 1.3. Recognise simple patterns and sequences. 1.4. Solve missing number problems.	N1/E1.1 N1/E1.3 N1/E1.8 N1/E1.8
2. Be able to read and write numbers.	2.1 Read whole numbers up to ten. 2.2 Recognise numbers in different styles. 2.3 Write whole numbers up to ten in words and figures.	N1/E1.2 N1/E1.3
3. Be able to compare whole numbers.	3.1. Show understanding of the vocabulary of comparing numbers. 3.2. Use the vocabulary of comparing numbers. 3.3. Show understanding of ordinal numbers, for example <i>first, second, third</i> .	N1/E1.3

Sample activities/contexts

- Count the number of screws needed for a hinge, count people in a group.
- Place playing cards in numerical order.
- Select correct tag for number of items in a dressing room.
- Select the correct floor button in a lift.
- Write a telephone number.
- Play a board game using a dice.
- Understand sport scores.
- Be able to state music chart positions.
- Follow directions to a floor in a building.

- Understand who finished where in a race.
- Find the missing number in a simple sequence, e.g. 2, 4, 6, __, 10.
- Solve simple word problems e.g. You go out with £5 and come home with £2. How much have you spent? ($5 - ? = 2$).

Entry 2: Addition, Subtraction and Multiplication

Unit code	Y/505/4861
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will add subtract and multiply numbers and make simple calculations in order to use and understand numbers in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to add and subtract whole numbers.	1.1 Add two-digit whole numbers. 1.2 Subtract two-digit whole numbers. 1.3 Round to the nearest 10. 1.4 Recall addition and subtraction facts to 10.	N1/E2.3 N1/E2.4 N1/E2.6 N1/E2.7
2. Be able to multiply whole numbers.	2.1 Multiply single-digit whole numbers.	N1/E2.5
3. Be able to solve everyday problems with and without a calculator.	3.1 Use and interpret +, - and = in practical situations to solve problems. 3.2 Use estimation in solving problems and to check if answers are sensible. 3.3 Solve one step number and word problems.	N1/E2.7 N1/E2.9 N1/E2.10

Sample activities/contexts

- Calculate the cost in pence of two items e.g. a newspaper and a can of drink.
- Calculate the difference in price in pence between two products, e.g. between two cans of drink.
- Calculate the change from a simple transaction
- Check delivery of goods in small batches (e.g. three boxes, each with 5 items included means all 15 items expected have been delivered)
- Calculate the total number of items, e.g. three books of stamps with four stamps in each.

- Calculate if you have enough butter for a recipe needing 100g, if you have two blocks, one of 30g and one of 60g.
- Translate word problems into written calculations, e.g. 'You buy a T-shirt and a scarf. The T-shirt costs £6. If you spend £11 altogether, how much was the scarf?'

Entry 2: Money, Time and Temperature

Unit code	Y/505/4858
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about common measures of time, money and temperature in order to use and make observations about them in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with money.	1.1 Make amounts up to a pound using different coins. 1.2 Calculate the cost in pence of more than one item. 1.3 Calculate the cost in whole pounds of more than one item. 1.4 Calculate the change from a transaction in pence and whole pounds.	MSS1/E2.1 MSS1/E2.2
2. Be able to work with time.	2.1 Read and record common date formats. 2.2 Express time on analogue clocks in hours, half, and understand time on 12 hour digital clocks in hours, half hours and quarter hours.	MSS1/E2.3 MSS1/E2.4
3. Know about temperature.	3.1 Read positive temperatures in everyday situations, for example from a weather chart. 3.2 Identify the unit of measurement for temperature in the UK. 3.3 Compare temperatures	MSS1/E2.8

Learning outcomes	Assessment criteria	Additional information
	in simple terms.	

Sample activities/contexts

- Pay the correct fare on a bus.
- Calculate the cost of two stamps and the change from £1.
- Calculate the cost of two tickets and the change from £20.
- Explain the 'use by' date on food labels, expiry dates.
- Write key personal dates.
- Use an electronic diary, keep to a simple timetable.
- Set an alarm clock or a timer.
- Compare temperatures for holiday destinations.
- Understand temperature in a weather forecast.

Entry 2: Using and Communicating Data

Unit code	R/505/4860
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn how to understand mathematical information and present results for use in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to extract information.	1.1 State the purpose of a table or graph and the associated labels. 1.2 Extract information from lists, tables, simple diagrams and bar charts. 1.3 Compare numerical information from a bar chart. 1.4 Collect simple numerical information.	HD1/E2.1 HD1/E2.2 HD1/E2.4
2. Be able to sort and classify objects.	2.1 Sort and classify objects using two criteria for example <i>size, colour, and shape</i> .	HD1/E2.3
3. Be able to present information so it makes sense to others.	3.1 Use straightforward means, such as tables, whole numbers, simple charts and diagrams to present results to others.	HD1/E2.4 HD1/E2.5

Sample activities/contexts

- Extract information of interest from sports league tables, fixture lists, travel timetables, concert lists.
- Extract information from charts in a holiday brochure (e.g. average daily hours of sunshine, rainfall, temperature) for a chosen month.
- Sort clothes for a jumble sale by size and person, e.g. men's/ women's /children's.
- Represent the results of a survey to show the preferred day for meetings in a table a simple bar chart.
- Produce a simple timetable to plan and manage their own learning.

Entry 2: Using Size, Shape and Measure

Unit code	D/505/4859
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about size, shape and related common measures for use in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to measure, estimate and compare length.	1.1 Measure length, using common standard and non-standard units, for example metre, centimetre, paces, feet. 1.2 Estimate lengths. 1.3 Compare different lengths for example more than a metre, less than a metre. 1.4 Read simple scales for length to the nearest labelled division. 1.5 Choose and use appropriate units and measuring instruments.	MSS1/E2.5 MSS1/E2.9 MSS1/E2.10
2. Be able to measure, estimate and compare weight.	2.1 Measure weight, using common standard units for example grammes, kilogrammes. 2.2 Estimate weights. 2.3 Compare weights, for example more than a kilogram, less than a kilogram. 2.4 Read simple scales for weight to the nearest labelled division. 2.5 Choose and use appropriate units and measuring instruments.	MSS1/E2.6 MSS1/E2.9 MSS1/E2.10
3. Be able to measure,	3.1 Measure capacity, using	MSS1/E2.9

<p>estimate and compare capacity.</p>	<p>common standard and non-standard units, for example litre, cupful.</p> <p>3.2 Estimate capacity.</p> <p>3.3 Compare capacity for example more than a litre, less than a litre.</p> <p>3.4 Read simple scales for capacity to the nearest labelled division.</p> <p>3.5 Choose and use appropriate units and measuring instruments.</p>	<p>MSS1/E2.10</p>
<p>4. Know about shape, positional vocabulary and space.</p>	<p>4.1 Recognise and name common 2-D and 3-D shapes</p> <p>4.2 Describe key properties of common 2-D and 3-D shapes</p> <p>4.3 Recognise right angles in everyday objects.</p> <p>4.4 Follow directions using everyday positional vocabulary, including left and right, in front, behind</p>	<p>MSS2/E2.1 MSS2/E2.2 MSS2/E2.3 MSS2/E2.4</p>

Sample activities/contexts

- Measure a variety of objects selecting the appropriate equipment such as a ruler for smaller items, tape measure for rooms.
- Measure the length and width of the room in paces.
- Use weight measures and scales to prepare ingredients for cooking.
- Weigh themselves to the nearest kilo.
- Use measuring jugs, measuring spoons and other suitable containers when cooking.
- Use non-standard measures such as cupful or tablespoon when cooking.
- Read the capacity of paint tins to buy a required amount.
- Give directions to find or put away equipment.
- Recognise references to the shape of signs in the Highway Code.

Entry 2: Using Whole Numbers and Fractions

Unit code	R/505/4857
Credit value	2
GLH	20
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about whole numbers and fractions in order to understand and use them in everyday situations.

This unit has 2 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with whole numbers.	1.1 Count reliably up to 100 items. 1.2 Order numbers up to 100. 1.3 Read whole numbers up to 100. 1.4 Write whole numbers up to 100.	N1/E2.1 N1/E2.2
2. Be able to work with fractions.	2.1 Recognise and use the words half and quarter and symbols $\frac{1}{2}$ and $\frac{1}{4}$. 2.2 Identify the relationship between a half and two quarters. 2.3 Find halves and quarters of small numbers of items. 2.4 Find halves and quarters of simple shapes.	N2/E2.1 N2/E2.2

Sample activities/contexts

- Check delivery of goods.
- Count people in a group or class.
- Find an address by reading door numbers.
- Read speed limit signs.
- Order coinage/notes in value.
- Write personal information such as date of birth.
- Write a list of numbers for a specific purpose.
- Choose and check numbers on a lottery ticket.
- Understand half price and $\frac{1}{2}$ price.
- Estimate equal portions of food such as cutting a pizza into quarters, halving a quantity of sweets for children.
- Use terms for describing reductions such as “half price” in everyday transactions.

Entry 3: Making Calculations

Unit code	K/505/4864
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will manipulate numbers and make simple calculations in order to use and understand numbers in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to add and subtract whole numbers.	1.1 Add using three-digit numbers. 1.2 Subtract using three-digit numbers. 1.3 Approximate by rounding numbers less than 1000 to the nearest 10 or 100. 1.4 Recall addition and subtraction facts to 20. 1.5 Estimate answers to addition and subtraction calculations.	N1/E3.2 N1/E3.3 N1/E3.7 N1/E3.8
2. Be able to multiply and divide whole numbers.	2.1 Multiply two- digit whole numbers by single-digit numbers. 2.2 Recall simple multiplication tables 2, 3, 4, 5, 10. 2.3 Divide two-digit whole numbers by single digit whole numbers. 2.4 Interpret remainders in division operations. 2.5 Estimate answers to multiplication and division calculations.	N1/E3.4 N1/E3.5 N1/E3.6 N1/E3.8

Learning outcomes	Assessment criteria	Additional information
3. Be able to solve problems with and without a calculator.	3.1 Interpret $+$, $-$, \times , \div and $=$ in practical situations. 3.2 Solve problems involving whole numbers and decimals. 3.3 Use of the standard order of operations in practical situations to solve multi-step calculations. 3.4 Solve two-step word problems.	N1/E3.9 N1/E3.10 N2/E3.4

Sample activities/contexts

- Calculate the production shortfall from a daily target.
- Carry out a stock check.
- Calculate the difference in prices between different items.
- Round distances to the nearest 10 or 100 miles, money to the nearest £100 or £10 in everyday situations.
- Calculate the total number of items in batches, e.g. 5 crates with 16 boxes to a crate.
- Work out the number of cars needed to transport a group of people.
- Dividing a bill when paying in a café.
- Check the size of answers obtained with a calculator to get a rough idea of cost, size, quantity, etc.
- Write their own problems which involve two steps to get the solution, e.g. You have £10 in your purse. You buy an item for £6 at the supermarket and then get £10 from the cashpoint. How much do you now have in your purse?

Entry 3: Money, Time and Temperature

Unit code	D/505/4862
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about common measures of time, money and temperature in order to use and make observations about them in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with money.	1.1 Add amounts of money using decimal notation. 1.2 Subtract amounts of money using decimal notation. 1.3 Round sums of money to the nearest £1 or 10p. 1.4 Estimate and make approximate calculations relating to cost.	MSS1/E3.1 MSS1/E3.2
2. Be able to work with time.	2.1 Read time in common formats on analogue clocks and 12 and 24 hour digital clocks. 2.2 Measure time in days, hours and minutes. 2.3 Record time in common formats and using 12 and 24 hour formats, including am and pm.	MSS1/E3.3
3. Be able to work with temperature.	3.1 Read temperature using standard units. 3.2 Measure temperature in standard units. 3.3 Compare temperatures.	MSS1/E3.9

Sample activities/contexts

- Check a till receipt, bank statement or deductions on a payslip.
- Use approximate calculations to estimate the cost of shopping.
- Make and keep appointments in different contexts, such as dentist, hairdresser, meeting friends.
- Recognise opening times from a shop-window notice.
- Plan a journey using timetables.
- Use listings to find programme times.
- Enter an appointment on a calendar.
- Set an analogue and digital clock to various times.
- Set oven temperature when cooking.
- Follow storage instructions for food.
- Compare temperatures to select holiday destination.
- Take own or a child's temperature.

Entry 3: Using and Communicating Data

Unit code	H/505/4863
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn how to understand mathematical information and present results for use in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to extract information.	1.1 Extract numerical information from lists, tables, diagrams, bar and tally charts. 1.2 Make numerical comparisons from bar charts and pictograms.	HD1/E3.1 HD1/E3.2
2. Be able to collect and record information.	2.1 Select categories before collecting data. 2.2 Collect data in familiar situations. 2.3 Record numerical data using a tally. 2.4 Make observations about results.	HD1/E3.3
3. Be able to organise and present information so it makes sense to others.	3.1 Use whole numbers, decimals and common fractions to present results. 3.2 Present data in tables, charts and diagrams, using key elements appropriately. 3.3 Use a simple scale to represent data in a bar chart or pictogram. 3.4 Provide simple descriptions of outcomes.	HD1/E3.4

Sample activities/contexts

- Extract information from a price list.
- Extract and interpret information from a database.
- Use a map to locate local amenities and services.
- Compare output with targets on a bar chart.
- Interpret information from straightforward charts in newspapers, magazines, etc.

- Collect data relevant to work, training or leisure interests, such as inventory lists, genres of music collections.
- Collect data on TV advertising categorised by product type.
- Interpret data from a survey, e.g. observing that more people in a staff survey wanted a coffee machine rather than a water cooler.
- Represent collected data relevant to work, training or leisure interests in a suitable form.
- Represent collected data on TV advertising in a bar chart.

Entry 3: Using Size, Shape and Measures

Unit code	M/505/4865
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about size, shape and related common measures for use in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to read, measure, estimate and compare length.	1.1 Estimate length and distance, using non-standard and standard units. 1.2 Compare length and distance, using non-standard units and standard units. 1.3 Select and use appropriate units for measuring length. 1.4 Select and use appropriate instruments for measuring length. 1.5 Read and measure length and distance, using standard and non-standard units, to the nearest labelled and unlabelled division e.g. with two or ten divisions between the numbered points on the scale.	MSS1/E3.4 MSS1/E3.5 MSS1/E3.8
2. Be able to read, measure, estimate and compare weight.	2.1 Estimate and compare weight, using non-standard and standard units. 2.2 Select and use appropriate units for measuring weight. 2.3 Select and use appropriate instruments	MSS1/E3.6 MSS1/E3.8

	<p>for measuring weight.</p> <p>2.4 Read and measure weight using standard and non-standard units to the nearest labelled and unlabelled division.</p>	
<p>3. Be able to read, measure, estimate and compare capacity.</p>	<p>3.1 Estimate and compare capacity.</p> <p>3.2 Select and use appropriate units for measuring capacity.</p> <p>3.3 Select and use appropriate instruments for measuring capacity.</p> <p>3.4 Read and measure capacity using standard and non-standard units to the nearest labelled and unlabelled division.</p>	<p>MSS1/E3.7 MSS1/E3.8</p>
<p>4. Know about shape, positional vocabulary and space.</p>	<p>4.1 Sort 2-D and 3-D shapes according to their properties (side length, angle, line of symmetry).</p> <p>4.2 Identify perimeter of simple shapes.</p> <p>4.3 Understand and use straightforward vocabulary related to shape, for example, <i>side, length, angle, line of symmetry</i>.</p> <p>4.4 Follow directions using positional vocabulary, including the four compass points.</p>	<p>MSS2/E3.1 MSS2/E3.2 MSS2/E3.3</p>

Sample activities/contexts

- Provide distances in miles from where you are to nearby places, e.g. towns and cities in the UK.
- Measure a football pitch, the distance to a town or city, the length of a curtain, the height of a door.
- Select packaged goods by weight.
- Weigh a letter or parcel to work out the postage rate.
- Choose and use a 5 m tape to measure the dimensions of a room.
- Mix a baby's bottle feed according to Instructions.

- Measure lubricant for a car or bike such as for an oil change.
- Pack items into a delivery van.
- Fill shelves with packaged items.
- Select an item of furniture to fit into an available space.
- Describe an item or place such as a garden or car park using terms such as perimeter, area, length, width, right angles.

Entry 3: Using Whole Numbers, Decimals, Fractions and Percentages

Unit code	T/505/4866
Credit value	2
GLH	20
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about whole numbers, fractions, decimals and percentages in order to understand and use them in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with whole numbers.	1.1 Count up to 1000. 1.2 Order numbers up to 1000. 1.3 Compare numbers up to 1000. 1.4 Read whole numbers up to 1000. 1.5 Write whole numbers up to 1000.	N1/E3.1
2. Be able to work with fractions.	2.1 State the meaning of unit fractions, for example $\frac{1}{5}$, $\frac{1}{8}$, $\frac{1}{10}$. 2.2 Write common fractions. 2.3 Recognise and use fractions in equivalent forms, for example $\frac{5}{10} = \frac{1}{2}$.	N2/E3.1 N2/E3.2
3. Be able to work with percentages.	3.1 Recognise and use common percentages, for example 25%, 50%. 3.2 Recognise and use common percentage/fraction/equivalences, for example $\frac{1}{2}$, 0.5, 50%.	N2/E3.2
4. Be able to work with decimals.	4.1 State the meaning of decimals up to two decimal places. 4.2 Read up to two decimal places in practical contexts, for example measure to one place and money to two places. 4.3 Write up to two decimal places in practical	N2/E3.3

Learning outcomes	Assessment criteria	Additional information
	contexts, for example measure to one place and money to two places. 4.4 Explain the use of a leading zero in contexts such as £0.35.	

Sample activities/contexts

- Carry out a stock check.
- Paying household bills.
- Using electronic banking.
- Read statistics from a website.
- Explain sale signs and special offers, e.g. 1/3 off.
- Express discounts in various ways such as ½ price, 50% off.
- In the context of measures, recognise relationships, e.g. that 5 mm is half a centimetre.
- Mix ingredients i.e. ½ a cup of flour.
- Read price labels written in decimal notation.

Level 1: Making Calculations

Unit code	F/505/4868
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will manipulate numbers and decimals and make calculations in order to use and understand numbers in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to add and subtract whole numbers and decimals.	1.1 Add numbers and decimals up to 2 places using efficient written and mental methods. 1.2 Subtract numbers and decimals up to 2 places using efficient written and mental methods. 1.3 Approximate by rounding. 1.4 Estimate answers to addition and subtraction calculations.	N1/L1.3 N1/L1.5 N1/L1.8 N1/L1.9 N1/L1.10 N2/L1.5 N2/L1.7
2. Be able to multiply and divide whole numbers and decimals.	2.1 Multiply and divide whole numbers and decimals by 10, 100 and 1000. 2.2 Multiply whole numbers and decimals up to 2 places using efficient written and mental methods. 2.3 Divide whole numbers and decimals up to 2 places using efficient written methods. 2.4 Recall tables up to 10X10 and make connections with division facts. 2.5 Estimate answers to	N1/L1.3 N1/L1.5 N1/L1.9 N2/L1.5 N2/L1.6

Learning outcomes	Assessment criteria	Additional information
	multiplication and divisions calculations.	
3. Be able to solve problems with and without a calculator.	3.1 Solve problems involving positive numbers using the standard order of operations to solve multi-step calculations. 3.2 Solve problems involving whole numbers, fractions decimals and percentages. 3.3 Use an electronic or mechanical aid to calculate efficiently using whole numbers fractions, decimals and percentages. 3.4 Check calculations using an electronic or mechanical aid.	N2/L1.10

Sample activities/contexts

- Check household bills.
- Keep records for timesheets or expenses.
- Estimate costs e.g. of the materials required to decorate a room.
- Estimate to check that answers are reasonable.
- Work out wages from an hourly rate.
- Work out weekly pay from hourly rate.
- Work out the cost for bulk purchases.
- Work out the total amount to be claimed for travel expenses.
- Use simple formulae in spread sheets, e.g. to add up a column on a simple balance sheet.
- Use appropriate calculations to solve problems, e.g. calculating the amount of concentrated lawn feed needed to cover a particular area, or comparing different products in different quantities to establish the best purchase.

Level 1: Money, Time and Temperature

Unit code	M/505/4882
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about common measures of time, money and temperature in order to use and make observations about them in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with money.	1.1 Add and subtract sums of money including through use of columns with decimal point aligned. 1.2 Multiply and divide sums of money. 1.3 Record sums of money, using appropriate conventions.	MSS1/L1.1 MSS1/L1.6
2. Be able to work with time.	2.1 Read time in common formats, on analogue clocks and 12 and 24 hour digital clocks and timetables. 2.2 Use different instruments to measure time in days, hours, minutes and seconds. 2.3 Record time in common formats and using 12 and 24 hour formats. 2.4 Add and subtract times in hours and minutes. 2.5 Convert units of time.	MSS1/L1.2 MSS1/L1.3
3. Be able to work with temperature.	3.1 Read, estimate, measure and compare temperature using common units and instruments. 3.2 Read temperature scales to the nearest labelled and unlabelled division.	MSS1/L1.4

Sample activities/contexts

- Complete financial transactions.
- Calculate benefits or entitlements.
- Calculate yearly wage from monthly/weekly wage and be able to reverse to the calculation.
- Price a list of items from a mail order catalogue and calculate the total cost.
- Find travel information and schedules on the internet and use timetables to plan journeys.
- Plan an event for work or training.
- Fill in a time sheet for work or learning.
- Measure, record and compare the time taken to complete different activities using different instruments.
- Calculate cooking times of a meal such as roast dinner.
- Calculate the duration of different activities, e.g. radio or TV programme, film, flight.
- Check the temperature in the workplace against regulations.
- Use understanding of safe temperatures for frozen foods, settings for domestic freezers, or storing chemicals to ensure storage at the right temperature, etc.

Level 1: Numbers, Decimals, Fractions and Percentages

Unit code	A/505/4867
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about numbers, fractions, decimals and percentages in order to understand and use them in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with numbers.	1.1 Read and write positive numbers including large numbers. 1.2 Order and compare positive numbers including large numbers. 1.3 Recognise negative numbers in practical contexts, for example <i>temperatures</i> .	N1/L1.1 N1/L1.2
2. Be able to work with fractions.	2.1 Read and write common fractions and mixed numbers. 2.2 Order and compare common fractions and mixed numbers. 2.3 Express one number as a fraction of another, for example <i>10 as a fraction of 30</i> . 2.4 Use fractions to find parts of whole number quantities or measurements, for example <i>2/3 or 3/4</i> .	N2/ L1.1 N2/ L1.2 N2/L1.12
3. Be able to work with decimals.	3.1 Read and write decimals up to three decimal places. 3.2 Order and compare decimals up to three decimal places.	N2/ L1.4

Learning outcomes	Assessment criteria	Additional information
4. Be able to work with percentages.	4.1 Read and write simple percentages, Order and compare simple percentages. 4.2 Recognise simple percentage increase and decrease. 4.3 Find simple percentage parts of quantities and measures. 4.4 Recognise common percentage, fraction and decimal equivalences. 4.5 Use equivalences to find part or whole number quantities.	N2/ L1.8 N2/ L1.9 N2/ L1.10 N2/L1.3

Sample activities/contexts

- Read/describe new car prices, house prices, cost of major projects.
- Read electricity gas meter.
- Explain the storage temperature on frozen food packets.
- Reduce or increase the quantities in a recipe or mixture such as for half the amount of cement mix.
- Calculate the price of item reduced by a percentage in a sale.
- Understand 20% off in a sale or a price increase of 10% on different items.
- Calculate a down payment or deposit on goods given in percentages.

Level 1: Numerical Relationships, Algebra and Ratios

Unit code	J/505/4869
Credit value	2
GLH	20
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about numerical relationships, algebra and ratio to solve problems in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Know about numerical relationships.	1.1 Recognise multiples of 2 to 9, up to 100. 1.2 Recognise multiples of 10, 50, 100, 1000. 1.3 Know square numbers up to 10 x10. 1.4 Identify factors of numbers. 1.5 Recall multiplication facts up to 10x10 and make connections with division facts.	N1/L1.5 N1/L1.6
2. Be able to solve problems involving algebra.	2.1 Form word expressions from simple expressions in symbols. 2.2 Evaluate simple expressions and formulae. 2.3 Translate simple word problems into symbols, +, -, ÷, x and numbers.	N1/L1.11
3. Be able to work with ratios.	3.1 Work out simple ratio as the number of parts. 3.2 Explain direct proportion as the same rate of increase or decrease. 3.3 Use understanding of direct proportion to make simple calculations.	N1/L1.7

Sample activities/contexts

- Calculate outcomes of problems such as “if 4 packets cost £2.50, 20 packets cost £12.50”.
- Dilute a liquid in a given ratio (e.g. weed killer, paint).
- Scale quantities up (or down), using direct proportion in cooking recipes, cement mixes, etc.
- Translate simple word problems into symbols, e.g. “ I had some money in my purse. I was given £3. I now have £10. How much did I have originally? Should become $x + 3 = 10$.

Level 1: Using and Communicating Data

Unit code	J/505/4872
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn how to understand mathematical information and present results for use in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to extract and interpret information.	1.1 Use understanding of title, labels and simple scales to extract information from lists, tables, diagrams, charts and line graphs. 1.2 Use understanding of title, labels and simple scales to interpret information from lists, tables, diagrams, charts and line graphs.	HD1/L1.1
2. Be able to collect and organise data.	2.1 Identify appropriate methods for collecting data. 2.2 Collect discrete data in tests and from observations. 2.3 Organise discrete data so that it can be easily transferred into a suitable format for sharing. 2.4 Find the arithmetical average (mean) for a set of data. 2.5 Find the arithmetical range for a set of data. 2.6 State how very high or low figures can distort the average (mean).	HD1/L1.2 HD1/L1.3 HD1/L1.4

Learning outcomes	Assessment criteria	Additional information
3. Be able to present results.	3.1 Use whole numbers, decimals and fractions and percentages to present results. 3.2 Represent data in tables, charts, diagrams and line graphs, to support the understanding of others. 3.3 Select suitable methods, format and scale to present and describe outcomes.	HD1/L1.2

Sample activities/contexts

- Extract information from price lists, stock inventories, catalogues, holiday brochures, conversion graphs, sales figures, temperature charts.
- Find the average age of people in a group.
- Find the goal average of a football player.
- Calculate the range in a patient's temperature in a 24-hour period.
- Represent collected data relevant to work, training or leisure interests in a suitable form to present to colleagues or fellow learners.
- Identify and use suitable methods for collecting and recording different data, e.g. counting (stock checks), tally (e.g. traffic flow), oral survey, written survey.

Level 1: Using Probability

Unit code	A/505/4870
Credit value	2
GLH	20
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn how to understand and use probability for use in everyday situations.

This unit has 2 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Know about probability.	1.1 Use the vocabulary of probability to talk about the likelihood of events and possible outcomes. 1.2 Show understanding that some events are certain to happen and some impossible.	HD2/L1.1
2. Be able to calculate and express probability.	2.1 Calculate probability by the number of ways the event can happen divided by the total number of possible outcomes. 2.2 Express probability using fractions, decimals and percentages with the probability scale of 0 to 1.	HD2/L1.2

Sample activities/contexts

- Show that you are more likely to get an odd number than a six with a single throw of a die.
- Explain there are two possible outcomes for the gender of a baby and there are three possible ways of getting an odd number with the throw of a die.
- Explain the probability that a football match can be won, drawn or lost or likelihood of colour of balls being drawn from a bag.

Level 1: Using Size, Shape and Space

Unit code	L/505/4890
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about size, shape and related common measures for use in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to measure length and distance.	1.1 Choose and use appropriate instruments for measuring length and distance. 1.2 Choose and use appropriate units for measuring length and distance. 1.3 Read scales to the nearest labelled and unlabelled division. 1.4 Add and subtract units of measure for length and distance. 1.5 Convert units of measure in the same system.	MSS1/L1.4 MSS1/L1.6 MSS1/L1.7
2. Be able to measure weight.	2.1 Choose and use appropriate instruments for measuring weight. 2.2 Choose and use appropriate units for measuring weight. 2.3 Read scales to the nearest labelled and unlabelled division. 2.4 Add and subtract units of measure for weight. 2.5 Convert units of measure in the same system.	MSS1/L1.4 MSS1/L1.6 MSS1/L1.7
3. Be able to measure capacity.	3.1 Choose and use appropriate instruments for measuring capacity. 3.2 Choose and use appropriate units for measuring capacity. 3.3 Read scales to the	MSS1/L1.4 MSS1/L1.6 MSS1/L1.7

Learning outcomes	Assessment criteria	Additional information
	<p>nearest labelled and unlabelled division.</p> <p>3.4 Add and subtract units of measure for capacity.</p> <p>3.5 Convert units of measure in the same system.</p>	
4. Be able to work with shape, positional vocabulary and space.	<p>4.1 Solve problems using the mathematical properties of regular 2-D shapes.</p> <p>4.2 Draw 2-D shapes in different orientations using grids, <i>for example in diagrams or plans.</i></p> <p>4.3 Work out the perimeter of simple shapes.</p> <p>4.4 Work out the area of rectangles.</p> <p>4.5 Work out the volume of shapes, <i>for example cuboids.</i></p> <p>4.6 Work out dimensions from drawings with simple shapes, for example 1cm represents 1m.</p> <p>4.7 Follow directions using appropriate positional vocabulary, including the eight compass points.</p>	<p>MSS1/L1.8</p> <p>MSS1/L1.9</p> <p>MSS1/L1.10</p> <p>MSS1/L1.11</p> <p>MSS2/L1.1</p> <p>MSS2/L1.2</p>

Sample activities/contexts

- Work out the length of cabling needed along a particular route, e.g. for a telephone extension.
- Compare the dimensions of furniture or appliances given in cm and mm.
- Find the distance between two cities using a road map or mileage chart.
- Work out how much is left after using a given weight.
- Work out personal weight gain or loss over a period of time.
- Convert centimetres to metres as appropriate for scenarios such as decorating.
- Work out how much would be left in a container of liquid after removing a given amount.
- Convert millilitres to litres as appropriate when working out volumes.
- Calculate the tiles needed for a floor or wall and draw a floor plan to show a room layout.
- Work out the fencing required for a vegetable plot.
- Draw a tiling pattern for a floor or wall area.

- Work out the volume of soil needed to fill a rectangular planter.
- Follow directions on a map, or plot a route using written instructions

Level 2: Making Calculations

Unit code	Y/505/4875
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will manipulate numbers, decimals and fractions and make calculations in order to use and understand mathematical information in everyday situations.

This unit has 2 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to carry out calculations when solving problems.	<p>1.1 Add and subtract whole numbers, fractions and decimals up to 3 places using efficient written and mental methods.</p> <p>1.2 Multiply and divide whole numbers, fractions and decimals up to 3 places using efficient written and mental methods.</p> <p>1.3 Explain the use of the words <i>multiple</i> and <i>factor</i> in interpreting multiplication and division facts.</p> <p>1.4 Approximate decimals when solving practical problems.</p> <p>1.5 Apply appropriate strategies to check answers.</p>	<p>N1/L2.2 N2.L2.4</p>
2. Solve problems with and without a calculator.	<p>2.1 Solve problems involving positive and negative numbers using the standard order of operations to solve multi-stage calculations.</p> <p>2.2 Solve problems efficiently involving whole numbers, fractions, decimals and percentages.</p>	<p>N1.L2.5 N2/L2.6 N2/L2.10</p>

Sample activities/contexts

- Work out a personal or family budget.
- Convert sums of money between currencies.
- Work out holiday spending.
- Convert amounts for cooking, for example a $\frac{1}{4}$ of a bag of sugar is 0.25 of a kilo.
- Use calculator for calculations to 3 decimal places (e.g. to work out average speed of Formula 1 car over 60 laps).
- Use a calculator to confirm or provide solutions.
- Use mental strategies to calculate approximate time of arrival for a journey of a known distance, presuming a certain average speed is maintained.
- Find the best mobile phone package, e.g. a monthly charge of £15 per month with 100 free minutes, or Pay As You Go charging 8p per minute.
- Compare the cost of paying for goods outright or using a credit arrangement.

Level 2: Money, Time and Temperature

Unit code	D/505/4876
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about common measures of time, money and temperature in order to use and make observations about them in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with money.	1.1 Calculate with sums of money. 1.2 Use currency exchange rates to convert between currencies.	MSS1/L2.1 MSS1/L2.6
2. Be able to work with time.	2.1 Calculate, measure and record time in different formats and in complex contexts. 2.2 Interpret dates and times written in different formats. 2.3 Select and use appropriate measuring instruments for different tasks, <i>for example timers on appliances, clocks, watches.</i> 2.4 State the relationship between units of time, <i>for example. sec, min, hr, day, week, month, year.</i>	MSS1/L2.2
3. Be able to work with temperature.	3.1 Estimate, measure and compare temperature. 3.2 Identify the different scales used to measure temperature. 3.3 Convert temperatures from Celsius to Fahrenheit and vice	MSS1/L2.4 MSS1/L2.6

Learning outcomes	Assessment criteria	Additional information
	versa. 3.4 Read and record the temperature accurately from a variety of different devices.	

Sample activities/contexts

- Calculate the cost in sterling of an item quoted in dollars.
- Calculate in sterling the price of an item or service when on holiday abroad, where price quoted is in a local currency.
- Calculate the value in sterling of currency brought back from holiday.
- Use a calculator to convert between currencies and check the calculation using a written or mental approximation.
- Plan an event, ensuring sufficient time is given to each activity and that it will end at an agreed time.
- Calculate cooking time according to weight.
- Use a calendar to calculate the length of time between given dates, e.g. term dates, holiday dates.
- Calculate the return date from a given departure date (for holidays) for different time spans e.g. 7 days, 10 days, 14 days, including where the start and return dates are in different months.
- Check Health and Safety regulations for working temperatures.
- Interpret oven temperatures for different recipes and estimate values for cool, medium and hot ovens.
- Work out temperature in Celsius where a recipe provides it in Fahrenheit.
- Convert temperatures in Celsius from a British weather report to Fahrenheit e.g. for an American friend.

Level 2: Numbers, Decimals, Fractions and Percentages

Unit code	H/505/4877
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about numbers, fractions, decimals and percentages in order to understand and use them in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to work with whole numbers.	1.1 Read and write positive and negative numbers of any size. 1.2 Order and compare positive and negative numbers of any size.	N1/L2.1
2. Be able to work with fractions.	2.1 Order and compare amounts or quantities. 2.2 Evaluate one number as a fraction of another.	N2/ L2.1 N2/ L2.3
3. Be able to work with decimals.	3.1 Order, approximate and compare decimals to solve practical problems.	N2/ L2.5
4. Be able to work with percentages.	4.1 Order and compare percentages. 4.2 Recognise simple percentage increase and decrease. 4.3 Find percentage parts of quantities and measurements. 4.4 Evaluate one number as a percentage of another. 4.5 Identify equivalencies between fractions, decimals and percentages <i>for example fractions, decimals and percentages are different ways of expressing the same thing.</i>	N2/ L2.7 N2/ L2.8 N2/ L2.9 N2/L2.2

Sample activities/contexts

- Understand and compare government spending figures on public services.
- Compare population statistics of local/national or international locations.
- Compare overtime rates.
- Change minutes into fractions of an hour to fill in a time sheet.
- Use fractions to define attributes of a group, e.g. what fraction of the group is female.
- Compare currency exchange rates.
- Compare times from sprint races that are recorded in seconds to three decimal places.
- Use interest rates to compare the cost of a loan with credit facilities.

Level 2: Numerical Relationships, Algebra and Ratio

Unit code	K/505/4878
Level	Level 2
Credit value	2
GLH	20
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about numerical relationships and ratio to solve problems in everyday situations.

This unit has 3 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to solve problems involving algebra.	1.1 Explain how words and symbols in expressions and formulae are used to represent variable quantities (numbers), not things. 1.2 Explain the order in which elements of an algebraic expression must be worked out (e.g. contents of brackets should be worked out first). 1.3 Evaluate expressions and make substitutions in given formulae in words and symbols to produce results.	N1/L2.4 N1/L2.5
2. Be able to work with ratios.	2.1 Calculate ratio, <i>for example</i> 3:2. 2.2 Calculate direct proportion.	N1/L2.3

Sample activities/contexts

- Use every day formulae such as those for cooking joints of meat, making curtains, changing temperature from Fahrenheit to Celsius, changing between metric and imperial units, miles per gallon or speed.
- Compare the price of products of different weights or capacities.
- Calculate winnings from betting odds.
- Calculate actual measurements from a scale drawing.
- Calculate currency conversion for holiday spending money or making purchases in another currency.

Level 2: Using and Communicating Data

Unit code	M/505/4879
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn how to understand mathematical information and present results for use in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to extract and use mathematical information.	1.1 Extract discrete data from lists, tables, diagrams, charts and line graphs. 1.2 Extract continuous data from lists, tables, diagrams, charts and line graphs. 1.3 Interpret and use continuous and discrete data from lists, tables, diagrams, charts and line graphs.	HD1/L2.1
2. Be able to collect and organise data.	2.1 Collect discrete data in tests and from observations. 2.2 Collect continuous data in tests and from observations. 2.3 Identify appropriate methods for collecting discrete and continuous data. 2.4 Organise discrete data. 2.5 Organise continuous data.	HD1/L2.2
3. Be able to compare data.	3.1 Find the mean, median and the mode. 3.2 Use the mean, median and the mode as appropriate to compare data.	HD1/L2.3 HD1/L2.4

Learning outcomes	Assessment criteria	Additional information
	3.3 Find the range in sets of data. 3.4 Use the range to describe the spread within sets of data. 3.5 Explain how high or low values can distort a data set.	
4. Be able to present results.	4.1 Use whole numbers, decimals and fractions and percentages to present results. 4.2 Represent discrete and continuous data in tables, charts, diagrams and line graphs. 4.3 Draw conclusions from tables, charts, diagrams and line graphs. 4.4 Select and use appropriate methods and forms to present and explain outcomes.	HD1/L2.2

Sample activities/contexts

- Extract information from a holiday brochure (dates, flight times, costs, supplements, reductions, insurance, etc).
- Interpret and use numerical data specific to occupational sectors.
- Measure a baby's weight at weekly intervals over a period of time and record it in a line graph.
- Measure plant growth over a period of time and present the information.
- Collect and record data from exchange rates or a particular share issue over a period of time.
- Carry out a survey and present the information for a local campaign.
- Compare the mean and median house prices from local data.
- Compare the rainfall in two locations.
- Compare the distribution of pay scales in two organisations.

Level 2: Using Probability

Unit code	H/505/4880
Credit value	2
GLH	20
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn how to understand and use probability for use in everyday situations.

This unit has 2 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Know about probability.	1.1 Explain the difference between 'independent' and 'combined' events in the context of probability. 1.2 Identify the range of possible outcomes of combined events.	HD2/L2.1
2. Be able to calculate and express probability.	2.1 Calculate probability for independent and combined events. 2.2 Record the range of possible outcomes of combined events in tree diagrams or in tables.	HD2/L2.1

Sample activities/contexts

- Discuss the possible outcomes of an event using simple examples such as tossing a coin, picking a specific playing card from a pack, throwing a six to start a board game, the possible gender of a baby, the outcome of a football match for one team, etc. Calculate the probability of picking balls from a bag or cards from a deck if the items are not replaced.
- Show how the outcomes of combined events can be recorded in a table and a tree diagram, e.g. the possible genders of twins, triplets, etc, or all the possible outcomes of using two spinners for a board game.
- Use a spread sheet or Word table to record the possible outcomes of combined events.

Level 2: Using Size, Shape and Space

Unit code	K/505/4881
Credit value	3
GLH	30
Related standards	This unit is based on the National Standards for Adult Numeracy and fully referenced to the Adult Numeracy Core Curriculum.
Aim	In this unit, learners will learn about size, shape and related common measures for use in everyday situations.

This unit has 4 learning outcomes

Learning outcomes	Assessment criteria	Additional information
1. Be able to measure length.	1.1 Estimate measure and compare length and distance, using metric and imperial units. 1.2 Calculate length and distance, using units within the same system. 1.3 Read scales to different levels of accuracy including reading between marked divisions. 1.4 Calculate length and distance between systems, using conversion tables and scales and approximate conversion factors, <i>for example 1in =2.54 cm.</i>	MSS1/L2.3 MSS1/L2.4 MSS1/L2.5 MSS1/L2.6
2. Be able to measure weight.	2.1 Estimate, measure and compare weight using metric and imperial units. 2.2 Calculate weight with units within the same system. 2.3 Read scales to different levels of accuracy including reading between marked divisions. 2.4 Calculate weight between systems using	MSS1/L2.3 MSS1/L2.4 MSS1/L2.5 MSS1/L2.6

Learning outcomes	Assessment criteria	Additional information
	<p>conversion tables and scales and approximate conversion factors, <i>for example 1kg= 2.2lbs and ounces to grams.</i></p>	
<p>3. Be able to measure capacity.</p>	<p>3.1 Estimate, measure and compare capacity using metric and imperial units.</p> <p>3.2 Calculate capacity with units within the same system.</p> <p>3.3 Read scales to different levels of accuracy including reading between marked divisions.</p> <p>3.4 Calculate capacity between systems using conversion tables and scales and approximate conversion factors, <i>for example 1pint = 568ml.</i></p>	<p>MSS1/L2.3 MSS1/L2.4 MSS1/L2.5 MSS1/L2.6</p>
<p>4. Be able to work with shape, positional vocabulary and space.</p>	<p>4.1 Recognise and name a range of 2-D representations of 3-D shapes, <i>for example in maps and plans.</i></p> <p>4.2 Solve problems involving mathematical properties, 2-D shapes and parallel lines.</p> <p>4.3 Draw 2-D shapes in different orientations using grids, for example reflect and rotate.</p> <p>4.4 Apply appropriate formulae for finding perimeters and areas of regular shapes, <i>for example rectangular and circular surfaces.</i></p> <p>4.5 Apply appropriate formulae for finding areas of composite</p>	<p>MSS1/L2.7 MSS1/L2.8 MSS1/L2.9 MSS1/L2.10 MSS2/L2.1 MSS2/L2.2 MSS2/L2.3</p>

Learning outcomes	Assessment criteria	Additional information
	shape. 4.6 Apply appropriate common formulae for finding volumes of regular shapes, <i>for example cuboid or cylinder</i> . 4.7 Work out dimensions from scale drawings, <i>for example 1:2</i> . 4.8 Follow directions using a range of positional vocabulary.	

Sample activities/contexts

- Estimate and check distances between towns, cities in the UK and further afield, using signposts, distance charts in road atlases, estimation from known distances on maps.
- Compare the nutritional information on different food labels.
- Work out the best value of products of different weights.
- Measure a room and be able to convert between feet/inches and cm/metres.
- Check the calibrations on a machine.
- Work out the best value of products of different capacities.
- Convert litres to gallons to check the petrol consumption on an old vehicle, or to compare it with a new vehicle.
- Extract measurements from plans and elevations.
- Design plan for calculating number and laying carpet tiles.
- Find the area of a non-rectangular room or plot of land.
- Calculate the length of fencing needed to fence off a circular pond.
- Calculate the wall area for painting, excluding doors and windows.
- Work out the volume of soil required for a cylindrical tub or water required for a pond.

5. Gateway Qualifications

Gateway Qualifications, a not for profit registered charity, is an Awarding Organisation based in Colchester.

We work with learning providers and industry experts to design and develop qualifications that benefit the learner and the employer.

We support flexible, responsive and quality assured learning opportunities whether it's in the classroom, at work, in the community or through distance learning.

We are recognised by Ofqual, to design, develop and submit qualifications to the Regulated Qualifications Framework (RQF).

6. Appendices

Appendix 1 Gateway Qualifications Mathematics units – referenced to the Adult Numeracy Core Curriculum Entry 1-3

	Number		Measures, shape and space		Handling data
Entry 1	Using whole numbers - 2 credits N1/E1.1 N1/E1.2 N1/E1.3 N1/E1.8	Adding and subtracting – 3 credits N1/E1.2 N1/E1.4 N1/E1.5 N1/E1.6 N1/E1.7	Money and time– 3 credits MSS1/E1.1 MSS1/E1.2	Using size, shape and space – 3 credits MSS1/E1.3 MSS1/E1.4 MSS1/E1.5 MSS1/E1.6 MSS2/E1.1 MSS2/E1.2	Using and communicating data– 3 credits HD1/E1.1 HD1/E1.2 HD1/E1.3
Entry 2	Using whole numbers and fractions – 2 credits N1/E2.1 N1/E2.2 N2/E2.1 N2/E2.2	Adding, subtracting and multiplication – 3 credits N1/E2.3 N1/E2.4 N1/E2.5 N1/E2.6 N1/E2.7 N1/E2.9 N1/E2.10	Money, time and temperature– 3 credits MSS1/E2.1 MSS1/E2.2 MSS1/E2.3 MSS1/E2.4 MSS1/E2.8	Using size, shape and measure – 3 credits MSS1/E2.5 MSS1/E2.6 MSS1/E2.9 MSS1/E2.10 MSS2/E2.1 MSS2/E2.2 MSS2/E2.3 MSS2/E2.4	Using and communicating data– 3 credits HD1/E2.1 HD1/E2.2 HD1/E2.3 HD1/E2.4 HD1/2.5
Entry 3	Using whole numbers, decimals, fractions and percentages – 2 credits	Making calculations – 3 credits	Money, time and temperature – 3 credits	Using size, shape and measures – 3 credits MSS1/E3.5	Using and communicating data– 3 credits

	Number		Measures, shape and space		Handling data
	N1/E3.1 N2/E3.1 N2/E3.2 N2/E3.3	N1/E3.2 N1/E3.3 N1/E3.4 N1/E3.5 N1/E3.6 N1/E3.7 N1/E3.8 N1/E3.9 N1/E3.10 N2/E3.4	MSS1/E3.1 MSS1/E3.2 MSS1/E3.3 MSS1/E3.9	MSS1/E3.6 MSS1/E3.7 MSS1/E3.8 MSS2/E3.1 MSS2/E3.2 MSS2/E3.3 MSS1/E3.4	HD1/E3.1 HD1/E3.2 HD1/E3.3 HD1/E3.4

Appendix 2 Gateway Qualifications Mathematics units – referenced to the Adult Numeracy Core Curriculum Levels 1 -2

	Number			Measure shape and Space		Handling Data	
Level 2	Numbers, decimals, fractions and percentages – 3 credits N1/L2.1 N2/ L2.1 N2/ L2.2 N2/ L2.3 N2/ L2.5 N2/ L2.7 N2/ L2.8 N2/ L2.9	Making calculations – 3 credits N1/L2.2 N2/L2.4 N1/L2.5 N2/L2.6 N2/L2.10	Numerical relationships, algebra and ratio – 2 credits N1/L2.4 N1/L2.3	Money, time and temperature – 3 credits MSS1/L2.1 MSS1/L2.2 MSS1/L2.4 MSS1/L2.6	Using size, shape and space – 3 credits MSS1/L2.3 MSS1/L2.4 MSS1/L2.5 MSS1/L2.6 MSS1/L2.7 MSS1/L2.8 MSS1/L2.9 MSS1/L2.10 MSS2/L2.1 MSS2/L2.2 MSS2/L2.3	Using and communicating data– 3 credits HD1/L1.1 HD1/L1.2 HD1/L1.3 HD1/L1.4	Using probability – 2 credits HD2/L2.1
Level 2	Numbers, decimals, fractions and percentages – 3 credits N1/L2.1 N2/ L2.1 N2/ L2.2 N2/ L2.3	Making calculations – 3 credits N1/L2.2 N2/L2.4 N1/L2.5 N2/L2.6 N2/L2.10	Numerical relationships, algebra and ratio – 2 credits N1/L2.4 N1/L2.3	Money, time and temperature – 3 credits MSS1/L2.1 MSS1/L2.2 MSS1/L2.4 MSS1/L2.6	Using size, shape and space – 3 credits MSS1/L2.3 MSS1/L2.4 MSS1/L2.5 MSS1/L2.6 MSS1/L2.7 MSS1/L2.8 MSS1/L2.9	Using and communicating data– 3 credits HD1/L1.1 HD1/L1.2 HD1/L1.3 HD1/L1.4	Using probability – 2 credits HD2/L2.1

Number		Measure shape and Space		Handling Data	
N2/ L2.5 N2/ L2.7 N2/ L2.8 N2/ L2.9				MSS1/L2.10 MSS2/L2.1 MSS2/L2.2 MSS2/L2.3	

Appendix 3: Mathematics Mapping to the Adult Numeracy Core Curriculum Entry 1-3, Levels 1-2 and Functional Skills

Number Entry 1

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using Whole Numbers</p> <ol style="list-style-type: none"> Be able to count and order whole numbers up to 10. <ul style="list-style-type: none"> Count reliably up to ten items. Order numbers up to ten. Recognise simple patterns and sequences. Solve missing number problems. Be able to read and write numbers. <ul style="list-style-type: none"> Read whole numbers up to ten. Recognise numbers in different styles. Write whole numbers up to ten in words and figures. Be able to compare whole numbers. <ul style="list-style-type: none"> Show understanding of the vocabulary of comparing numbers. Use the vocabulary of comparing numbers. Show understanding of ordinal numbers, for example first, second, third. <p>Adding and Subtracting</p> <ol style="list-style-type: none"> Be able to add whole numbers. <ul style="list-style-type: none"> Add single-digit numbers with totals to 10. Interpret + and =. Use related vocabulary, for example and, plus, equals. Be able to subtract whole numbers. 	<p>N1/E1.1 Count up to 10 items N1/E1.3 Order and compare numbers up to 10, including zero N1/E1.8 Solve missing number problems</p> <p>N1/E1.2 Read and write numbers up to 10, including zero N1/E1.3 Order and compare numbers up to 10, including zero N1/E1.3 Order and compare numbers up to 10, including zero</p> <p>N1/E1.4 Add and subtract single-digit numbers (total up to 10) N1/E1.6 Interpret + , - , = in practical situations N1/E1.2 Read and write numbers up to 10, including zero N1/E1.5 Add and subtract single-digit numbers</p>	<p>E1.1 Read, write, order and compare numbers up to 20 E1.2. Use whole numbers to count up to 20 items including zero</p> <p>E1.3. Add numbers which total up to 20, and subtract numbers from numbers up to 20 E1.4. Recognise and interpret the symbols + , – and = appropriately</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<ul style="list-style-type: none"> • Subtract single-digit numbers from numbers up to 10. • Interpret - and =. • Use related vocabulary, for example take away, minus, equals. <p>3. Be able to solve everyday problems with and without a calculator.</p> <ul style="list-style-type: none"> • Identify and Interpret symbols +, -, = in practical situations. • Estimate number of items (up to 10). • Be able to use primary functions of a calculator. 	<p>(total up to 10)</p> <p>N1/E1.6 Interpret + , - , = in practical situations</p> <p>N1/E1.2 Read and write numbers up to 10, including zero</p> <p>N1/E1.6 Interpret + , - , = in practical situations</p> <p>N1/E1.7 Estimate number of items (up to 10), e.g. How many pens are on the desk?</p>	

Measures, Shape and Space Entry 1

Unit Details	Adult Numeracy Core Curriculum	Functional Skills standard (NB requirements which do not fully map to adult numeracy core curriculum and unit are highlighted in red)
<p>Money and Time</p> <ol style="list-style-type: none"> Know about money. <ul style="list-style-type: none"> Recognise and select different coins. Recognise and select different notes. Identify prices expressed in whole numbers up to 10. Know about time. <ul style="list-style-type: none"> Relate familiar events to different times, days, seasons. Demonstrate understanding of and use vocabulary related to time. <p>Using Size, Shape and Space</p> <ol style="list-style-type: none"> Know about size and weight. <ul style="list-style-type: none"> Use simple terms to describe size. Use simple terms to describe dimensions. Use simple terms to describe weight. Use simple terms to describe capacity. Use direct comparisons for size weight and dimensions. Know about shape, positional vocabulary and space. <ul style="list-style-type: none"> Identify common 2-D and 3-D shapes. Follow directions using everyday positional vocabulary, for example, between, inside, near to. 	<p>MSS1/E1.1 Recognise and select coins and notes</p> <p>MSS1/E1.2 Relate familiar events to times of the day, days of the week, seasons of the year</p> <p>MSS1/E1.3 Describe and compare size of at least two items (length, width, height, weight, capacity)</p> <p>MSS1/E1.4 Describe and compare size of at least two items (length, width, height, weight, capacity)</p> <p>MSS1/E1.5 Describe and compare size of at least two items (length, width, height, weight, capacity)</p> <p>MSS1/E1.6 Describe and compare size of at least two items (length, width, height, weight, capacity)</p> <p>MSS2/E1.1 Recognise and name simple 2-D and 3-D shapes</p> <p>MSS2/E1.2 Follow directions using everyday positional vocabulary</p>	<p>E1.5. Recognise coins and notes and write them in numbers (<i>with the correct symbols (£ & p),</i>) where these involve numbers up to 20</p> <p>E1.7. Know the number of days in a week, months, and seasons in a year. Be able to name and sequence.</p> <p>E1.6. Read 12 hour digital and analogue clocks in hours.</p> <p>E1.8. Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity</p> <p>E1.9. Identify and recognise common 2-D and 3-D shapes including circle, cube, rectangle (incl.</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills standard (NB requirements which do not fully map to adult numeracy core curriculum and unit are highlighted in red)
		square) and triangle E1.10. Use everyday positional vocabulary to describe position and direction including left, right, in front, behind, under and above

Handling Data Entry 1

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using and Communicating Data</p> <ol style="list-style-type: none"> 1. Be able to extract information. <ul style="list-style-type: none"> • Identify simple numerical information from a list. 2. Be able to sort and classify objects. <ul style="list-style-type: none"> • Identify criteria to sort familiar objects. • Sort and classify objects using a single criterion. • Make simple lists. 3. Be able to present results. <ul style="list-style-type: none"> • Use objects, simple images or whole numbers to present results. • Use basic terms when identifying outcomes. 	<p>HD1/E1.1 Extract simple information from lists</p> <p>HD1/E1.2 Sort and classify objects using a single criterion; make simple lists</p> <p>HD1/E1.3 Construct simple diagrams</p>	<p>E1.11. Read numerical information from lists</p> <p>E1.12. Sort and classify objects using a single criterion</p> <p>E1.13. Read and draw simple charts and diagrams including a tally chart, block diagram/graph</p>

Number Entry 2

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using Whole Numbers and Fractions</p> <ol style="list-style-type: none"> Be able to work with whole numbers. <ul style="list-style-type: none"> Count reliably up to 100 items. Order numbers up to 100. Read whole numbers up to 100. Write whole numbers up to 100. Be able to work with fractions. <ul style="list-style-type: none"> Recognise and use the words half and quarter and symbols $\frac{1}{2}$ and $\frac{1}{4}$. Identify the relationship between a half and two quarters. Find halves and quarters of small numbers of items. Find halves and quarters of simple shapes. <p>Addition, Subtraction and Multiplication</p> <ol style="list-style-type: none"> Be able to add and subtract whole numbers. <ul style="list-style-type: none"> Add two-digit whole numbers. Subtract two-digit whole numbers. Round to the nearest 10. Recall addition and subtraction facts to 10. Be able to multiply whole numbers. <ul style="list-style-type: none"> Multiply single-digit whole numbers. Be able to solve everyday problems with and without a calculator. <ul style="list-style-type: none"> Use and interpret +, - and = in practical situations to solve problems. Use estimation in solving problems and to check if answers are sensible. Solve one step number and word problems. 	<p>N1/E2.1 Count up to 100 items N1/E2.2 Read, write, order and compare numbers up to 100</p> <p>N2/E2.1 Read, write and compare halves and quarters of quantities N2/E2.2 Find halves and quarters of small numbers of items or shapes</p> <p>N1/E2.3 Add and subtract two-digit whole numbers N1/E2.4 Recall addition and subtraction facts to 10 N1/E2.6 Round to nearest 10 N1/E2.7 Interpret +, -, x, = in practical situations N1/E2.5 Multiply single-digit whole numbers</p> <p>N1/E2.7 Interpret +, -, x, = in practical situations N1/E2.9 Use estimation in solving problems and to check if solutions are sensible</p>	<p>E2.1. Count reliably up to 100 items E2.2. Read, write, order (and compare) numbers up to 200</p> <p>E2.10. Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes</p> <p>E2.3. Recognise and sequence odd and even numbers up to 100</p> <p>E2.11. Read, write and use decimals to one decimal place</p> <p>E2.5. Add and subtract two-digit numbers</p> <p>E2.9. Approximate by rounding to the nearest 10, and use this rounded answer to check results</p> <p>E2.6. Multiply whole numbers in the range 0x0 to 12x12 (times tables)</p> <p>E2.4. Recognise and interpret the symbols +, -, x, ÷ and = appropriately</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
	N1/E2.10 Solve one-step problems	E2.8. Divide two-digit whole numbers by single-digit whole numbers and express remainders

Measures, Shape and Space Entry 2

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Money, Time and Temperature</p> <ol style="list-style-type: none"> Be able to work with money. <ul style="list-style-type: none"> Make amounts up to a pound using different coins. Calculate the cost in pence of more than one item. Calculate the cost in whole pounds of more than one item. Calculate the change from a transaction in pence and whole pounds. Be able to work with time. <ul style="list-style-type: none"> Read and record common date formats. Express time on analogue clocks in hours, half, and understand time on 12 hour digital clocks in hours, half hours and quarter hours. Know about temperature. <ul style="list-style-type: none"> Read positive temperatures in everyday situations, for example from a weather chart. Identify the unit of measurement for temperature in the UK. Compare temperatures in simple terms. <p>Using Size, Shape and Measure</p> <ol style="list-style-type: none"> Be able to measure, estimate and compare length. <ul style="list-style-type: none"> Measure length, using common standard and non-standard units, for example metre, centimetre, paces, feet. Estimate lengths. Compare different lengths for example more than a metre, less than a metre. 	<p>MSS1/E2.1 Make amounts up to £1, using coins MSS1/E2.2 Calculate the cost of more than one item; calculate the change from a transaction in pence or in whole pounds</p> <p>MSS1/E2.3 Read and record time in common date formats MSS1/E2.4 Read and understand time displayed on analogue and 12-hour digital clocks (hours, half hours, quarter hours) MSS1/E2.8 Read and compare positive temperatures in everyday situations</p> <p>MSS1/E2.5 Read, estimate, measure and compare weight using common standard units; length and capacity using common standard and non-standard units MSS1/E2.9 Read simple scales to nearest labelled division MSS1/E2.10 Choose and use appropriate units and measuring instruments</p>	<p>E2.12. Calculate money with pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p)</p> <p>E2.13. Read and record time in common date formats, and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour digital clock E2.17. Read and compare positive temperatures</p> <p>E2.7. Know the number of hours in a day and weeks in a year. Be able to name and sequence</p> <p>E2.14. Use metric measures of length including millimetres, centimetres, metres and kilometres</p> <p>E2.18. Read and use simple scales to the nearest labelled division</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<ul style="list-style-type: none"> • Read simple scales for length to the nearest labelled division. • Choose and use appropriate units and measuring instruments. 2. Be able to measure, estimate and compare weight. <ul style="list-style-type: none"> • Measure weight, using common standard units for example grams, kilogrammes. • Estimate weights. • Compare weights, for example more than a kilogram, less than a kilogram. • Read simple scales for weight to the nearest labelled division. • Choose and use appropriate units and measuring instruments. 3. Be able to measure, estimate and compare capacity. <ul style="list-style-type: none"> • Measure capacity, using common standard and non-standard units, for example litre, cupful. • Estimate capacity. • Compare capacity for example more than a litre, less than a litre. • Read simple scales for capacity to the nearest labelled division. • Choose and use appropriate units and measuring instruments. 4. Know about shape, positional vocabulary and space. <ul style="list-style-type: none"> • Recognise and name common 2-D and 3-D shapes • Describe key properties of common 2-D and 3-D shapes 	<p>MSS1/E2.6 Read, estimate, measure and compare weight using common standard units; length and capacity using common standard and non-standard units</p> <p>MSS1/E2.9 Read simple scales to nearest labelled division</p> <p>MSS1/E2.10 Choose and use appropriate units and measuring instruments</p> <p>MSS1/E2.9 Read simple scales to nearest labelled division</p> <p>MSS1/E2.10 Choose and use appropriate units and measuring instruments</p> <p>MSS2/E2.1 Recognise and name common 2-D and 3-D shapes</p> <p>MSS2/E2.2 Describe properties of common 2-D and 3-D shapes</p> <p>MSS2/E2.3 Follow directions using everyday positional vocabulary (including left and right)</p> <p>MSS2/E2.4 Recognise right angles in everyday objects</p>	<p>E2.15. Use measures of weight including grams and kilograms</p> <p>E2.16. Use measures of capacity including millilitres and litres</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<ul style="list-style-type: none">• Recognise right angles in everyday objects.• Follow directions using everyday positional vocabulary, including left and right, in front, behind.		

Handling Data Entry 2

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using and Communicating Data</p> <ol style="list-style-type: none"> 1. Be able to extract information. <ul style="list-style-type: none"> • State the purpose of a table or graph and the associated labels. • Extract information from lists, tables, simple diagrams and bar charts. • Compare numerical information from a bar chart. • Collect simple numerical information. 2. Be able to sort and classify objects. <ul style="list-style-type: none"> • Sort and classify objects using two criteria for example size, colour, and shape. 3. Be able to present information so it makes sense to others. <ul style="list-style-type: none"> • Use straightforward means, such as tables, whole numbers, simple charts and diagrams to present results to others. 	<p>HD1/E2.1 Extract information from lists, tables, simple diagrams and bar charts HD1/E2.2 Make numerical comparisons from bar charts HD1/E2.4 Collect simple numerical information</p> <p>HD1/E2.3 Sort and classify objects using two criteria</p> <p>HD1/E2.4 Collect simple numerical information HD1/E2.5 Represent information so that it makes sense to others</p>	<p>E2.22. Extract information from lists, tables, diagrams and bar charts E2.23. Make numerical comparisons from bar charts</p> <p>E2.24. Sort and classify objects using two criteria</p> <p>E2.25. Take information from one format and represent the information in another format including use of bar charts</p>

Number Entry 3

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using Whole Numbers, Decimals, Fractions and Percentages</p> <ol style="list-style-type: none"> Be able to work with whole numbers. <ul style="list-style-type: none"> Count up to 1000. Order numbers up to 1000. Compare numbers up to 1000. Read whole numbers up to 1000. Write whole numbers up to 1000. Be able to work with fractions. <ul style="list-style-type: none"> State the meaning of unit fractions, for example $\frac{1}{5}$, $\frac{1}{8}$, $\frac{1}{10}$. Write common fractions. Recognise and use fractions in equivalent forms, for example $\frac{5}{10} = \frac{1}{2}$. Be able to work with percentages. <ul style="list-style-type: none"> Recognise and use common percentages, for example 25%, 50%. Recognise and use common percentage/fraction/equivalences, for example $\frac{1}{2}$, 0.5, 50%. Be able to work with decimals. <ul style="list-style-type: none"> State the meaning of decimals up to two decimal places. Read up to two decimal places in practical contexts, for example measure to one place and money to two places. Write up to two decimal places in practical contexts, for example measure to one place and money to two places. Explain the use of a leading zero in contexts such as £0.35. 	<p>N1/E3.1 Count up to 1000 in multiples of 10 and 100</p> <p>N2/E3.1 Understand unit fractions, e.g. $\frac{1}{5}$, $\frac{1}{10}$, $\frac{1}{8}$</p> <p>N2/E3.2 Recognise and use common percentages (e.g. 25%, 50%); and recognise and use common fraction/decimal/ percentage equivalences (e.g. for $\frac{1}{2}$ and $\frac{1}{4}$)</p> <p>N2/E3.2 Recognise and use equivalent fractions, e.g. $\frac{5}{10} = \frac{1}{2}$</p> <p>N2/E3.3 Read, write and understand decimals (measures: one decimal place; money: two decimal places)</p>	<p>E3.6. Recognise and continue linear sequences of numbers up to 100</p> <p>E3.9. Recognise and continue sequences that involve decimals</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Making Calculations</p> <ol style="list-style-type: none"> Be able to add and subtract whole numbers. <ul style="list-style-type: none"> Add using three-digit numbers. Subtract using three-digit numbers. Approximate by rounding numbers less than 1000 to the nearest 10 or 100. Recall addition and subtraction facts to 20. Estimate answers to addition and subtraction calculations. Be able to multiply and divide whole numbers. <ul style="list-style-type: none"> Multiply two-digit whole numbers by single-digit numbers. Recall simple multiplication tables 2, 3, 4, 5, 10. Divide two-digit whole numbers by single digit whole numbers. Interpret remainders in division operations. Estimate answers to multiplication and division calculations. Be able to solve problems with and without a calculator. <ul style="list-style-type: none"> Interpret +, -, x, ÷ and = in practical situations. Solve problems involving whole numbers and decimals. Use of the standard order of operations in practical situations to solve multi-step calculations. Solve two-step word problems. 	<p>N1/E3.2 Add and subtract three-digit whole numbers N1/E3.3 Recall addition and subtraction facts to 20 N1/E3.7 Round numbers less than 1000 to nearest 10 or 100 N1/E3.8 Use estimation in solving problems</p> <p>N1/E3.4 Multiply two-digit whole numbers by single-digit whole numbers N1/E3.5 Tables (2, 3, 4, 5,10) N1/E3.6 Divide two digits by one digit and interpret remainders N1/E3.8 Use estimation in solving problems</p> <p>N1/E3.9 Use the standard order of operations in practical situations to solve multi-step calculations, e.g. cost of 2 teas and 3 coffees N1/E3.10 Solve two-step word problems N2/E3.4 Solve problems involving whole numbers and decimals</p>	

Measures, Shape and Space Entry 3

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Money, Time and Temperature</p> <ol style="list-style-type: none"> Be able to work with money. <ul style="list-style-type: none"> Add amounts of money using decimal notation. Subtract amounts of money using decimal notation. Round sums of money to the nearest £1 or 10p. Estimate and make approximate calculations relating to cost. Be able to work with time. <ul style="list-style-type: none"> Read time in common formats on analogue clocks and 12 and 24 hour digital clocks. Measure time in days, hours and minutes. Record time in common formats and using 12 and 24 hour formats, including am and pm. Be able to work with temperature. <ul style="list-style-type: none"> Read temperature using standard units. Measure temperature in standard units. Compare temperatures. <p>Using Size, Shape and Measures</p> <ol style="list-style-type: none"> Be able to read, measure, estimate and compare length. <ul style="list-style-type: none"> Estimate length and distance, using non-standard and standard units. Compare length and distance, using non-standard units and standard units. Select and use appropriate units for measuring length. Select and use appropriate instruments for measuring length. Read and measure length and distance, using 	<p>MSS1/E3.1 Add and subtract sums of money using decimal notation</p> <p>MSS1/E3.2 Round sums of money to nearest £ and 10p</p> <p>MSS1/E3.3 Read, measure and record time in common date formats, 12-hour and 24-hour clock</p> <p>MSS1/E3.9 Read, measure and compare temperature using common units and instruments</p> <p>MSS1/E3.4 Read and interpret distance in everyday situations</p> <p>MSS1/E3.5 Read, estimate, measure and compare length, weight and capacity using common and standard units</p> <p>MSS1/E3.8 Choose and use appropriate units and measuring instruments</p>	<p>E3.10. Calculate with money using decimal notation and express money correctly in writing in pounds and pence</p> <p>E3.11. Round amounts of money to the nearest £1 or 10p</p> <p>E3.13. Read time from analogue and 24 hour digital clocks in hours and minutes</p> <p>E3.12. Read, measure and record time using am and pm</p> <p>See E3.14</p> <p>E3.14. Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division</p> <p>E3.15. Compare metric measures of length including millimetres, centimetres, metres and kilometres</p> <p>E3.18. Use a suitable instrument to measure</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>standard and non-standard units, to the nearest labelled and unlabelled division e.g. with two or ten divisions between the numbered points on the scale.</p> <p>2. Be able to read, measure, estimate and compare weight.</p> <ul style="list-style-type: none"> • Estimate and compare weight, using non-standard and standard units. • Select and use appropriate units for measuring weight. • Select and use appropriate instruments for measuring weight. • Read and measure weight using standard and non-standard units to the nearest labelled and unlabelled division. <p>3. Be able to read, measure, estimate and compare capacity.</p> <ul style="list-style-type: none"> • Estimate and compare capacity. • Select and use appropriate units for measuring capacity. • Select and use appropriate instruments for measuring capacity. • Read and measure capacity using standard and non-standard units to the nearest labelled and unlabelled division. <p>4. Know about shape, positional vocabulary and space.</p> <ul style="list-style-type: none"> • Sort 2-D and 3-D shapes according to their properties (side length, angle, line of symmetry). • Identify perimeter of simple shapes. • Understand and use straightforward vocabulary related to shape, for example, side, length, angle, 	<p>MSS1/E3.6 Read simple scales to the nearest labelled and unlabelled division</p> <p>MSS1/E3.8 Choose and use appropriate units and measuring instruments</p> <p>MSS1/E3.7 Read simple scales to the nearest labelled and unlabelled division</p> <p>MSS1/E3.8 Choose and use appropriate units and measuring instruments</p> <p>MSS2/E3.1 Sort 2-D and 3-D shapes according to their properties (side length, angle, line of symmetry)</p> <p>MSS2/E3.2 Identify perimeter of simple shapes (rectangle, triangle)</p> <p>MSS2/E3.3 Follow directions using positional vocabulary (including the four compass points)</p>	<p>mass and length</p> <p>E3.16. Compare measures of weight including grams and kilograms</p> <p>E3.17. Compare measures of capacity including millilitres and litres</p> <p>E3.19. Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>line of symmetry.</p> <ul style="list-style-type: none"> Follow directions using positional vocabulary, including the four compass points. 		<p>E3.20. Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns</p>

Handling Data Entry 3

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using and Communicating Data</p> <ol style="list-style-type: none"> Be able to extract information. <ul style="list-style-type: none"> Extract numerical information from lists, tables, diagrams, bar and tally charts. Make numerical comparisons from bar charts and pictograms. Be able to collect and record information. <ul style="list-style-type: none"> Select categories before collecting data. Collect data in familiar situations. Record numerical data using a tally. Make observations about results. Be able to organise and present information so it makes sense to others. <ul style="list-style-type: none"> Use whole numbers, decimals and common fractions to present results. Present data in tables, charts and diagrams, using key elements appropriately. Use a simple scale to represent data in a bar chart or pictogram. Provide simple descriptions of outcomes. 	<p>HD1/E3.1 Extract information from lists, tables, diagrams, bar and tally charts</p> <p>HD1/E3.2 Make numerical comparisons from bar charts and pictograms</p> <p>HD1/E3.3 Make observations and record numerical information using a tally</p> <p>HD1/E3.4 Organise and represent information in different ways so it makes sense to others</p>	<p>E3.21. Extract information from lists, tables, diagrams and charts and create frequency tables</p> <p>E3.23. Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts</p> <p>E3.22. Interpret information, to make comparisons and record changes, from different formats including bar charts and simple line graphs</p>

Number Level 1

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Numbers, Decimals, Fractions and Percentages</p> <ol style="list-style-type: none"> Be able to work with numbers. <ul style="list-style-type: none"> Read and write positive numbers including large numbers. Order and compare positive numbers including large numbers. Recognise negative numbers in practical contexts, for example temperatures. Be able to work with fractions. <ul style="list-style-type: none"> Read and write common fractions and mixed numbers. Order and compare common fractions and mixed numbers. Express one number as a fraction of another, for example 10 as a fraction of 30. Use fractions to find parts of whole number quantities or measurements, for example $\frac{2}{3}$ or $\frac{3}{4}$. Be able to work with decimals. <ul style="list-style-type: none"> Read and write decimals up to three decimal places. Order and compare decimals up to three decimal places. Be able to work with percentages. <ul style="list-style-type: none"> Read and write simple percentages, Order and compare simple percentages. Recognise simple percentage increase and decrease. Find simple percentage parts of quantities and measures. Recognise common percentage, fraction and decimal equivalences. 	<p>N1/L1.1 Read, write, order and compare any size positive numbers N1/L1.2 Recognise negative numbers in practical contexts, e.g. temperature</p> <p>N2/ L1.1 Read, write, order and compare common fractions and mixed numbers, decimals to three decimal places and simple percentages, e.g. 5%, 10%, 25%, 50%, 75% N2/ L1.2 Find parts of whole number quantities or measurements, e.g. $\frac{2}{3}$ or $\frac{3}{4}$ N2/L1.12 Express one number as a fraction of another number, e.g. What is 10 as a fraction of 30? N2/ L1.4 Read, write, order and compare common fractions and mixed numbers, decimals to three decimal places and simple percentages, e.g. 5%, 10%, 25%, 50%, 75% N2/ L1.8 Read, write, order and compare common fractions and mixed numbers, decimals to three decimal places and simple percentages, e.g. 5%, 10%, 25%, 50%, 75% N2/ L1.9 Find simple percentage parts of quantities and measurements N2/ L1.10 Find simple percentage increase and decrease</p>	<p>L1.1. Read, write, order and compare large numbers up to one million L1.2. Recognise and use positive and negative numbers</p> <p>L1.8. Read, write, order and compare common fractions and mixed numbers</p> <p>L1.9. Find fractions of whole number quantities or measurements</p> <p>L1.10. Read, write, order and compare decimals up to three decimal places</p> <p>L1.13. Read, write, order and compare percentages in whole numbers L1.14. Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof L1.19. Calculate discounts in multiples of 5% on amounts of money</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<ul style="list-style-type: none"> Use equivalences to find part or whole number quantities. <p>Making Calculations</p> <ol style="list-style-type: none"> Be able to add and subtract whole numbers and decimals. <ul style="list-style-type: none"> Add numbers and decimals up to 2 places using efficient written and mental methods. Subtract numbers and decimals up to 2 places using efficient written and mental methods. Approximate by rounding. Estimate answers to addition and subtraction calculations. Be able to multiply and divide whole numbers and decimals. <ul style="list-style-type: none"> Multiply and divide whole numbers and decimals by 10, 100 and 1000. Multiply whole numbers and decimals up to 2 places using efficient written and mental methods. Divide whole numbers and decimals up to 2 places using efficient written methods. Recall tables up to 10X10 and make connections with division facts. Estimate answers to multiplication and divisions calculations. Be able to solve problems with and without a calculator. 	<p>N2/L1.3 Recognise common fraction, percentage and decimal equivalents and use these to find part or whole-number quantities</p> <p>N1/L1.3 Add and subtract using efficient written and mental methods N1/L1.5 Tables to 10×10 N1/L1.8 Approximate whole numbers by rounding N1/L1.9 Use estimation in finding solutions to problems N1/L1.10 Solve problems involving positive numbers, using the standard order of operations to solve multi-step calculations N2/L1.5 Divide decimals up to two decimal places N2/L1.7 Approximate decimals by rounding to a whole number or one or two decimal places N1/L1.3 Add and subtract using efficient written and mental methods N1/L1.5 Tables to 10×10 N1/L1.9 Use estimation in finding solutions to problems N2/L1.5 Add and subtract decimals up to two places N2/L1.6 Multiply whole numbers and decimals by 10, 100 and 1000</p>	<p>L1.16. Recognise and calculate equivalences between common fractions, percentages and decimals</p> <p>L1.11. Add, subtract, multiply and divide decimals up to two decimal places</p> <p>L1.12. Approximate by rounding to a whole number or to one or two decimal places</p> <p>L1.3. Multiply and divide whole numbers and decimals by 10, 100, 1000</p> <p>L1.15. Estimate answers to calculations using fractions and decimals</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
		L1.18. Calculate simple interest in multiples of 5% on amounts of money

Measures, Shape and Space Level 1

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Money, Time and Temperature</p> <ol style="list-style-type: none"> Be able to work with money. <ul style="list-style-type: none"> Add and subtract sums of money including through use of columns with decimal point aligned. Multiply and divide sums of money. Record sums of money, using appropriate conventions. Be able to work with time. <ul style="list-style-type: none"> Read time in common formats, on analogue clocks and 12 and 24 hour digital clocks and timetables. Use different instruments to measure time in days, hours, minutes and seconds. Record time in common formats and using 12 and 24 hour formats. Add and subtract times in hours and minutes. Convert units of time. Be able to work with temperature. <ul style="list-style-type: none"> Read, estimate, measure and compare temperature using common units and instruments. Read temperature scales to the nearest labelled and unlabelled division. <p>Using Size, Shape and Space</p> <ol style="list-style-type: none"> Be able to measure length and distance. <ul style="list-style-type: none"> Choose and use appropriate instruments for measuring length and distance. Choose and use appropriate units for measuring length and distance. Read scales to the nearest labelled and unlabelled division. Add and subtract units of measure for length and 	<p>MSS1/L1.1 Add, subtract, multiply, divide sums of money and record</p> <p>MSS1/L1.6 Add and subtract common units of measure within the same system</p> <p>MSS1/L1.2 Read and measure time accurately and use timetables</p> <p>MSS1/L1.3 Calculate using time in familiar contexts</p> <p>MSS1/L1.4 Read, estimate, measure and compare distance, length, weight, capacity and temperature</p> <p>MSS1/L1.4 Read, estimate, measure and compare distance, length, weight, capacity and temperature.</p>	<p>L1.20. Convert between units of length, weight, capacity, money and time, in the same system</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>distance.</p> <ul style="list-style-type: none"> • Convert units of measure in the same system. <p>2. Be able to measure weight.</p> <ul style="list-style-type: none"> • Choose and use appropriate instruments for measuring weight. • Choose and use appropriate units for measuring weight. • Read scales to the nearest labelled and unlabelled division. • Add and subtract units of measure for weight. • Convert units of measure in the same system. <p>3. Be able to measure capacity.</p> <ul style="list-style-type: none"> • Choose and use appropriate instruments for measuring capacity. • Choose and use appropriate units for measuring capacity. • Read scales to the nearest labelled and unlabelled division. • Add and subtract units of measure for capacity. • Convert units of measure in the same system. <p>4. Be able to work with shape, positional vocabulary and space.</p> <ul style="list-style-type: none"> • Solve problems using the mathematical properties of regular 2-D shapes. • Draw 2-D shapes in different orientations using grids, for example in diagrams or plans. • Work out the perimeter of simple shapes. • Work out the area of rectangles. • Work out the volume of shapes, for example cuboids. • Work out dimensions from drawings with simple shapes, for example 1cm represents 1m. 	<p>MSS1/L1.6 Add and subtract common units of measure within the same system</p> <p>MSS1/L1.7 Convert units of measure in the same system</p> <p>MSS1/L1.4 Read, estimate, measure and compare distance, length, weight, capacity and temperature.</p> <p>MSS1/L1.6 Add and subtract common units of measure within the same system</p> <p>MSS1/L1.7 Convert units of measure in the same system</p> <p>MSS1/L1.4 Read, estimate, measure and compare distance, length, weight, capacity and temperature</p> <p>MSS1/L1.6 Add and subtract common units of measure within the same system</p> <p>MSS1/L1.7 Convert units of measure in the same system</p> <p>MSS1/L1.8 Work out perimeter of simple shapes (rectangle, equilateral triangle)</p> <p>MSS1/L1.9 Work out area of rectangles</p> <p>MSS1/L1.10 Work out volume, e.g. cuboids</p>	<p>L1.24. Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles</p> <p>L1.22. Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles</p> <p>L1.23. Calculate the volumes of cubes and</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<ul style="list-style-type: none"> Follow directions using appropriate positional vocabulary, including the eight compass points. 	<p>MSS1/L1.11 Work out dimensions from drawings with simple shapes, e.g. 1cm represents 1m</p> <p>MSS2/L1.1 Solve problems using mathematical properties of regular 2-D shapes (tessellation or symmetry)</p> <p>MSS2/L1.2 Draw 2-D shapes in different orientations using grids, e.g. in diagrams or plans</p>	<p>cuboids</p> <p>L1.21. Recognise and make use of simple scales on maps and drawings</p> <p>L1.26. Use angles when describing position and direction, and measure angles in degrees</p> <p>L1.25. Interpret plans, elevations and nets of simple 3-D shapes</p>

Handling Data Level 1

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using and Communicating Data</p> <ol style="list-style-type: none"> Be able to extract and interpret information. <ul style="list-style-type: none"> Use understanding of title, labels and simple scales to extract information from lists, tables, diagrams, charts and line graphs. Use understanding of title, labels and simple scales to interpret information from lists, tables, diagrams, charts and line graphs. Be able to collect and organise data. <ul style="list-style-type: none"> Identify appropriate methods for collecting data. Collect discrete data in tests and from observations. Organise discrete data so that it can be easily transferred into a suitable format for sharing. Find the arithmetical average (mean) for a set of data. Find the arithmetical range for a set of data. State how very high or low learners can distort the average (mean). Be able to present results <ul style="list-style-type: none"> Use whole numbers, decimals and fractions and percentages to present results. Represent data in tables, charts, diagrams and line graphs, to support the understanding of others. Select suitable methods, format and scale to present and describe outcomes. <p>Using Probability</p> <ol style="list-style-type: none"> Know about probability. <ul style="list-style-type: none"> Use the vocabulary of probability to talk about the likelihood of events and possible outcomes. Show understanding that some events are certain 	<p>HD1/L1.1 Extract and interpret information, e.g. tables, diagrams, charts, simple line graphs</p> <p>HD1/L1.2 Collect, organise and represent discrete data, e.g. tables, diagrams, charts, line graphs</p> <p>HD1/L1.3 Find the mean for a set of data</p> <p>HD1/L1.4 Find the range for a set of data</p> <p>HD1/L1.2 Collect, organise and represent discrete data, e.g. tables, diagrams, charts, line graphs</p>	<p>L1.28. Group discrete data and represent grouped data graphically</p> <p>L1.29. Find the mean and range of a set of quantities</p> <p>L1.27. Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs</p> <p>L1.30. Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>to happen and some impossible.</p> <p>2. Be able to calculate and express probability.</p> <ul style="list-style-type: none"> • Calculate probability by the number of ways the event can happen divided by the total number of possible outcomes. • Express probability using fractions, decimals and percentages with the probability scale of 0 to 1. 	<p>HD2/L1.1 Use the vocabulary of probability to discuss the likelihood of events</p> <p>HD2/L1.2 Express the likelihood of an event using fractions, decimals and percentages, with the probability scale of 0 to 1</p>	<p>events</p> <p>L1.31. Use equally likely outcomes to find the probabilities of simple events and express them as fractions</p>

Number Level 2

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Numbers, Fractions, Decimals and Percentages</p> <ol style="list-style-type: none"> Be able to work with whole numbers. <ul style="list-style-type: none"> Read and write positive and negative numbers of any size. Order and compare positive and negative numbers of any size. Be able to work with fractions. <ul style="list-style-type: none"> Order and compare amounts or quantities. Evaluate one number as a fraction of another. Be able to work with decimals. <ul style="list-style-type: none"> Order, approximate and compare decimals to solve practical problems. Be able to work with percentages. <ul style="list-style-type: none"> Order and compare percentages. Recognise simple percentage increase and decrease. Find percentage parts of quantities and measurements. Evaluate one number as a percentage of another. Identify equivalencies between fractions, decimals and percentages for example fractions, decimals and percentages are different ways of expressing the same thing. <p>Making Calculations</p> <ol style="list-style-type: none"> Be able to carry out calculations when solving problems. <ul style="list-style-type: none"> Add and subtract whole numbers, fractions and decimals up to 3 places using efficient written and mental methods. Multiply and divide whole numbers, fractions and 	<p>N1/L2.1 Order and compare any size positive and negative numbers</p> <p>N2/ L2.1 Use fractions to order and compare amounts or quantities N2/ L2.3 Evaluate numbers as a fraction or percentage of another number</p> <p>N2/ L2.5 Round decimals when solving practical problems</p> <p>N2/ L2.7 Understand percentage increase and decrease N2/ L2.8 Find percentage parts of quantities and measurements N2/ L2.9 Evaluate numbers as a fraction or percentage of another number N2/L2.2 Identify equivalencies between fractions, decimals and percentages</p> <p>N1/L2.2 Add and subtract positive and negative numbers using efficient written and mental methods N2/L2.4 Add and subtract fractions</p>	<p>L2.1. Read, write, order and compare positive and negative numbers of any size</p> <p>L2.7. Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers</p> <p>L2.8. Express one number as a fraction of another L2.9. Order, approximate and compare decimals</p> <p>L2.6. Calculate percentage change (any size increase and decrease), and original value after percentage change</p> <p>L2.5. Work out percentages of amounts and express one amount as a percentage of another L2.4. Identify and know the equivalence between fractions, decimals and percentages</p> <p>L2.2. Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation L2.10. Add, subtract, multiply and divide decimals up to three decimal places</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>decimals up to 3 places using efficient written and mental methods.</p> <ul style="list-style-type: none"> • Explain the use of the words multiple and factor in interpreting multiplication and division facts. • Approximate decimals when solving practical problems. • Apply appropriate strategies to check answers. <p>2. Solve problems with and without a calculator.</p> <ul style="list-style-type: none"> • Solve problems involving positive and negative numbers using the standard order of operations to solve multi-stage calculations. • Solve problems efficiently involving whole numbers, fractions, decimals and percentages. <p>Numerical Relationships, Algebra and Ratio</p> <p>1. Be able to solve problems involving algebra.</p> <ul style="list-style-type: none"> • Explain how words and symbols in expressions and formulae are used to represent variable quantities (numbers), not things. • Explain the order in which elements of an algebraic expression must be worked out (e.g. contents of brackets should be worked out first). • Evaluate expressions and make substitutions in given formulae in words and symbols to produce results. <p>2. Be able to work with ratios.</p> <ul style="list-style-type: none"> • Calculate ratio, for example 3:2. • Calculate direct proportion. 	<p>N1/L2.5 Solve problems involving positive and negative numbers, using the standard order of operations to solve multi-stage calculations</p> <p>N2/L2.6 Use estimation to find appropriate solutions to problems and check if solutions are sensible</p> <p>N2/L2.10 Solve problems efficiently involving whole numbers, fractions, decimals and percentages</p> <p>N1/L2.4 Form word expressions from simple expressions in symbols; make substitutions; evaluate expressions and formulae; write simple formulae using symbols and numbers, e.g. cost of so many items at a given price</p> <p>N1/L2.5 Solve problems involving positive and negative numbers, using the standard order of operations to solve multi-stage calculations</p> <p>N1/L2.3 Calculate ratio and direct proportion</p>	<p>L2.12. Follow the order of precedence of operators, including indices</p> <p>L2.3. Evaluate expressions and make substitutions in given formulae in words and symbols</p> <p>L2.11. Understand and calculate using ratios, direct proportion and inverse proportion</p>

Measures, Shape and Space Level 2

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Money, Time and Temperature</p> <p>1. Be able to work with money.</p> <ul style="list-style-type: none"> • Calculate with sums of money. • Use currency exchange rates to convert between currencies. <p>2. Be able to work with time.</p> <ul style="list-style-type: none"> • Calculate, measure and record time in different formats and in complex contexts. • Interpret dates and times written in different formats. • Select and use appropriate measuring instruments for different tasks, for example timers on appliances, clocks, watches. • State the relationship between units of time, for example. sec, min, hr, day, week, month, year. <p>3. Be able to work with temperature.</p> <ul style="list-style-type: none"> • Estimate, measure and compare temperature. • Identify the different scales used to measure temperature. • Convert temperatures from Celsius to Fahrenheit and vice versa. • Read and record the temperature accurately from a variety of different devices. <p>Using Size, Shape and Space</p> <p>1. Be able to measure length.</p> <ul style="list-style-type: none"> • Estimate measure and compare length and distance, using metric and imperial units. • Calculate length and distance, using units within 	<p>MSS1/L2.1 Calculate with money; convert between currencies MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors MSS1/L2.2 Calculate, measure and record time in complex contexts</p> <p>MSS1/L2.4 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where</p>	<p>L2.13. Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting</p> <p>L2.14. Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>the same system.</p> <ul style="list-style-type: none"> • Read scales to different levels of accuracy including reading between marked divisions. • Calculate length and distance between systems, using conversion tables and scales and approximate conversion factors, for example 1 in =2.54 cm. <p>2. Be able to measure weight.</p> <ul style="list-style-type: none"> • Estimate, measure and compare weight using metric and imperial units. • Calculate weight with units within the same system. • Read scales to different levels of accuracy including reading between marked divisions. • Calculate weight between systems using conversion tables and scales and approximate conversion factors, for example 1kg= 2.2lbs and ounces to grams. <p>3. Be able to measure capacity.</p> <ul style="list-style-type: none"> • Estimate, measure and compare capacity using metric and imperial units. • Calculate capacity with units within the same system. • Read scales to different levels of accuracy including reading between marked divisions. • Calculate capacity between systems using conversion tables and scales and approximate conversion factors, for example 1pint = 568ml. <p>4. Be able to work with shape, positional vocabulary and space.</p>	<p>appropriate</p> <p>MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors</p> <p>MSS1/L2.3 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate</p> <p>MSS1/L2.4 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate</p> <p>MSS1/L2.5 Calculate with units of measure within the same system</p> <p>MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors</p> <p>MSS1/L2.3 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate</p> <p>MSS1/L2.4 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate</p> <p>MSS1/L2.5 Calculate with units of measure within the same system</p>	

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<ul style="list-style-type: none"> Recognise and name a range of 2-D representations of 3-D shapes, for example in maps and plans. Solve problems involving mathematical properties, 2-D shapes and parallel lines. Draw 2-D shapes in different orientations using grids, for example reflect and rotate. Apply appropriate formulae for finding perimeters and areas of regular shapes, for example rectangular and circular surfaces. Apply appropriate formulae for finding areas of composite shape. Apply appropriate common formulae for finding volumes of regular shapes, for example cuboid or cylinder. Work out dimensions from scale drawings, for example 1:2. Follow directions using a range of positional vocabulary. 	<p>MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors</p> <p>MSS1/L2.3 Read scales to different levels of accuracy including reading between marked divisions</p> <p>MSS1/L2.4 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate</p> <p>MSS1/L2.5 Calculate with units of measure within the same system</p> <p>MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors</p> <p>MSS1/L2.7 Understand and use given formulae for finding perimeter and area of regular shapes (e.g. rectangles, circles), and area of composite shapes volume of regular shapes, e.g. cylinders, cuboids</p> <p>MSS1/L2.8 Understand and use given formulae for finding perimeter and area of regular shapes (e.g. rectangles, circles), and area of composite shapes volume of regular shapes, e.g. cylinders, cuboids</p> <p>MSS1/L2.9 Understand and use given formulae for finding perimeter and area of regular shapes (e.g. rectangles, circles), and area of composite shapes volume of regular shapes, e.g. cylinders, cuboids</p> <p>MSS1/L2.10 Work out dimensions from scale drawings; understand scale written as a ratio</p> <p>MSS2/L2.1 Recognise and name a range of 2-D</p>	<p>L2.20. Understand and use common 2-D representations of 3-D objects</p> <p>L2.16. Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)</p> <p>L2.17. Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)</p> <p>L2.18. Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
	<p>representations of 3-D shapes, e.g. in maps and plans</p> <p>MSS2/L2.2 Solve problems involving mathematical properties, 2-D shapes and parallel lines</p> <p>MSS2/L2.3 Draw 2-D shapes in different orientations using grids, e.g. reflect and rotate</p>	<p>L2.15. Calculate using compound measures including speed, density and rates of pay</p> <p>L2.21. Draw 3-D shapes to include plans and elevations</p> <p>L2.22. Calculate values of angles and/or coordinates with 2-D and 3-D shapes</p> <p>L2.19. Use coordinates in 2-D, positive and negative, to specify the positions of points</p>

Handling Data Level 2

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>Using and Communicating Data</p> <ol style="list-style-type: none"> Be able to extract and use mathematical information. <ul style="list-style-type: none"> Extract discrete data from lists, tables, diagrams, charts and line graphs. Extract continuous data from lists, tables, diagrams, charts and line graphs. Interpret and use continuous and discrete data from lists, tables, diagrams, charts and line graphs. Be able to collect and organise data. <ul style="list-style-type: none"> Collect discrete data in tests and from observations. Collect continuous data in tests and from observations. Identify appropriate methods for collecting discrete and continuous data. Organise discrete data. Organise continuous data. Be able to compare data. <ul style="list-style-type: none"> Find the mean, median and the mode. Use the mean, median and the mode as appropriate to compare data. Find the range in sets of data. Use the range to describe the spread within sets of data. Explain how high or low values can distort a data set. Be able to present results. <ul style="list-style-type: none"> Use whole numbers, decimals and fractions and percentages to present results. Represent discrete and continuous data in tables, 	<p>HD1/L2.1 Extract and interpret discrete and continuous data from tables, diagrams, charts and line graphs</p> <p>HD1/L2.2 Collect, organise and represent discrete and continuous data, e.g. tables, diagrams, charts, line graphs</p> <p>HD1/L2.3 Find mean, median, and mode; use them to compare two sets of data as appropriate</p> <p>HD1/L2.4 Find the range; use range to describe the spread within sets of data</p> <p>HD1/L2.2 Collect, organise and represent discrete</p>	<p>L2.23. Calculate the median and mode of a set of quantities</p> <p>L2.25. Use the mean, median, mode and range to compare two sets of data</p> <p>L2.28. Draw and interpret scatter diagrams and</p>

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the unit and/or adult numeracy core curriculum are highlighted in red)
<p>charts, diagrams and line graphs.</p> <ul style="list-style-type: none"> • Draw conclusions from tables, charts, diagrams and line graphs. • Select and use appropriate methods and forms to present and explain outcomes. <p>Using Probability</p> <ol style="list-style-type: none"> 1. Know about probability. <ul style="list-style-type: none"> • Explain the difference between ‘independent’ and ‘combined’ events in the context of probability. • Identify the range of possible outcomes of combined events. 2. Be able to calculate and express probability. <ul style="list-style-type: none"> • Calculate probability for independent and combined events. • Record the range of possible outcomes of combined events in tree diagrams or in tables. 	<p>and continuous data, e.g. tables, diagrams, charts, line graphs</p> <p>HD2/L2.1 Identify the range of possible outcomes of combined events and record using diagrams or tables</p> <p>HD2/L2.1 Identify the range of possible outcomes of combined events and record using diagrams or tables</p>	<p>recognise positive and negative correlation</p> <p>L2.26. Work out the probability of combined events including the use of diagrams and tables, including two-way tables</p> <p>L2.27. Express probabilities as fractions, decimals and percentages</p> <p>L2.24. Estimate the mean of a grouped frequency distribution from discrete data</p>

gateway
qualifications



Gateway Qualifications
Gateway House
3 Tollgate Business Park
Colchester
CO3 8AB

01206 911211

enquiries@gatewayqualifications.org.uk
www.gatewayqualifications.org.uk