

Assessment Guidance & Sample Assessment Activities

Suite of Mathematics Qualifications

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

Version 4.0

(April 2019)

learning your way

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



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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 Rations	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	
Aim	

Learner name and	
number	

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

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



	Portfolio - write up of weather chartsHd3		
 Be able to organise and present information so it makes sense to others 			
3.1 Use whole numbers,	Portfolio - Tv results Hd1	BHarris	JMoore
fractions to present results.	Portfolio -snacks results Hd4		
	Portfolio - representation stationary Hd2		
3.2 Present data in tables, charts and diagrams, using key elements appropriately.	Portfolio - Tv survey chart record Hd1	BHarris	JMoore
	Portfolio - snack survey table		
3.3 Use a simple scale to represent data in a bar chart or pictogram.	Portfolio - Tv survey chart record Hd1	BHarris	JMoore
	Portfolio - own weather bar chart Hd3		
3.4 Provide simple descriptions of outcomes.	Portfolio - Discussion with tutor-TV- Hd1	BHarris	JMoore
	Portfolio - Discussion with		
	tutor - snacksHd4		
	Portfolio - Discussion with tutor - weather bar chart Hd3		

Learner's Declaration:

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

Name	Fred Smith	Signed: FSmith	Date: 31/1/2018
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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:
 JMcore
 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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

Lea	arning outcomes	Assessment	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 and, plus, equals. 	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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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

Lea	arning 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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
 Know about size and weight. 	 criteria 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
 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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 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,</i> <i>third.</i> 	N1/E1.3

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to add and subtract whole numbers. 	 Add two-digit whole numbers. Subtract two-digit whole numbers. Round to the nearest 10. 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 	N1/E2.7 N1/E2.9 N1/E2.10
	and word problems.	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to work with money. 	1.1 Make amounts up to a pound using different coins.	MSS1/E2.1 MSS1/E2.2
	1.2 Calculate the cost in pence of more than one item.	
	 Calculate the cost in whole pounds of more than one item. 	
	1.4 Calculate the change from a transaction in pence and whole pounds.	
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 	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 	MSS1/E2.8
	measurement fortemperature in the UK.3.3 Compare temperatures	



Learning outcomes	Assessment criteria	Additional information
	in simple terms.	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional
1.	Be able to extract information.	 Criteria 1.1 State the purpose of a table or graph and the associated labels. 1.2 Extract information from lists, tables, simple diagrams and ba charts. 1.3 Compare numerical information from a bar chart. 1.4 Collect simple numerical information. 	r
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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to measure, estimate and compare length. 	1.1 Measure length, using common standard and non-standard units, for example metre,	MSS1/E2.5 MSS1/E2.9 MSS1/E2.10
	 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. 	
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 	MSS1/E2.6 MSS1/E2.9 MSS1/E2.10
3. Be able to measure,	measuring instruments. 3.1 Measure capacity, using	MSS1/E2.9



estimate and compare	common standard and	MSS1/E2.10
capacity.	non-standard units, for	
	example litre, cupful.	
	3.2 Estimate capacity.	
	3.3 Compare capacity for	
	example more than a	
	litre, less than a litre.	
	3.4 Read simple scales for	
	capacity to the nearest	
	labelled division.	
	3.5 Choose and use	
	appropriate units and	
	measuring instruments.	
4. Know about shape,	4.1 Recognise and name	MSS2/E2.1
positional vocabulary and	common 2-D and 3-D	MSS2/E2.2
space.	shapes	MSS2/E2.3
	4.2 Describe key properties	WI552/E2.4
	of common 2-D and 3-D	
	shapes	
	4.3 Recognise right angles	
	in everyday objects.	
	4.4 Follow directions using	
	everyday positional	
	vocabulary, including left	
	and right, in front, behind	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional
	criteria	information
1. Be able to work with whole	1.1 Count reliably up to 100 items.	N1/E2.1
numbers.	1.2 Order numbers up to 100.	N1/E2.2
	1.3 Read whole numbers up to 100.	
	1.4 Write whole numbers up to 100.	
2. Be able to work with fractions.	2.1 Recognise and use the words	N2/E2.1
	half and quarter and symbols $\frac{1}{2}$	N2/E2.2
	and ¼.	
	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.	

- 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 ½ 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 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 	N1/E3.2 N1/E3.3 N1/E3.7 N1/E3.8
	numbers less than 1000 to the nearest 10 or 100. 1.4 Recall addition and subtraction facts to 20.	
	 Estimate answers to addition and subtraction calculations. 	
2. Be able to multiply and divide whole numbers.	2.1 Multiply two- digit whole numbers by single-digit numbers.	N1/E3.4 N1/E3.5 N1/E3.6
	2.2 Recall simple multiplication tables 2, 3, 4, 5, 10.	N 1/E3.0
	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.	



Learning outcomes	Assessment criteria	Additional information
3. Be able to solve problems with and without a calculator.	 3.1 Interpret +, -, x, ÷ 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

- 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

D/505/4862
3
30
This unit is based on the National Standards for Adult Numeracy and fully
referenced to the Adult Numeracy Core Curriculum.
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	Additional information
	criteria	
1. Be able to work with	1.1 Add amounts of money	MSS1/E3.1
money.	using decimal notation.	MSS1/E3.2
	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.	
2. Be able to work with time.	2.1 Read time in common	MSS1/E3.3
	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.	
3. Be able to work with	3.1 Read temperature using	MSS1/E3.9
temperature.	standard units.	
	3.2 Measure temperature in	
	standard units.	
	3.3 Compare temperatures.	



- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
1. Be able to extract information.	1.1 Extract numerical information from lists, tables, diagrams, bar and tally charts.	HD1/E3.1 HD1/E3.2
	1.2 Make numerical comparisons from bar charts and pictograms.	
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 	HD1/E3.4
	outcomes.	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
1. Be able to read, measure,	1.1 Estimate length and	MSS1/E3.4
estimate and compare	distance, using non-	MSS1/E3.5
length.	standard and standard	MSS1/E3.8
	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.	
2. Be able to read, measure,	2.1 Estimate and compare	MSS1/E3.6
estimate and compare	weight, using non-	MSS1/E3.8
weight.	standard and standard	
	units.	
	2.2 Select and use	
	appropriate units for	
	measuring weight.	
	2.3 Select and use	
	appropriate instruments	


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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	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 1/5, 1/8, 1/10. 2.2 Write common fractions. 2.3 Recognise and use fractions in equivalent forms, for example 5/10 =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/equi valences, for example ½, 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. 	

- 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 1/2 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to add and subtract whole numbers and decimals. 	 Add numbers and decimals up to 2 places using efficient written and mental methods. 	N1/L1.3 N1/L1.5 N1/L1.8 N1/L1.9
	 Subtract numbers and decimals up to 2 places using efficient written and mental methods. 	N1/L1.10 N2/L1.5 N2/L1.7
	1.3 Approximate by rounding.	
	1.4 Estimate answers to addition and subtraction calculations.	
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.	N1/L1.3 N1/L1.5 N1/L1.9 N2/L1.5
	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	



Learning outcomes	Assessment	Additional information
	criteria	
	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. 	N2/L1.10
	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.	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	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



- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
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 temperatures. 	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 10 as a fraction of 30. 2.4 Use fractions to find parts of whole number quantities or measurements, for example 2/3 or 3/4. 	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	Additional information
	criteria	
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 	N2/ L1.8 N2/ L1.9 N2/ L1.10 N2/L1.3
	 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. 	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 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. 	NI/L1.11
 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



- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
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 	HD1/L1.1
	and line graphs.	
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	Additional information
	criteria	
3. Be able to present results.	3.1 Use whole numbers, decimals and fractions and percentages to present results.	HD1/L1.2
	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.	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
1. Know about probability.	1.1 Use the vocabulary of	HD2/L1.1
	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.	
2. Be able to calculate and	2.1 Calculate probability by	HD2/L1.2
express probability.	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.	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to measure length and distance. 	1.1 Choose and use appropriate instruments for measuring length and distance.	MSS1/L1.4 MSS1/L1.6 MSS1/L1.7
	 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.	
	 Convert units of measure in the same system. 	
2. Be able to measure weight.	2.1 Choose and use appropriate instruments for measuring weight.	MSS1/L1.4 MSS1/L1.6 MSS1/L1.7
	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.	
 Be able to measure capacity. 	3.1 Choose and use appropriate instruments for measuring capacity.	MSS1/L1.4 MSS1/L1.6 MSS1/L1.7
	3.2 Choose and use appropriate units for measuring capacity.	
	3.3 Read scales to the	



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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to carry out calculations when solving problems. 	1.1 Add and subtract whole numbers, fractions and decimals up to 3 places using efficient written and mental methods	N1/L2.2 N2.L2.4
	 Multiply and divide whole numbers, fractions and decimals up to 3 places using efficient written and mental methods. 	
	 Explain the use of the words <i>multiple</i> and <i>factor</i> in interpreting multiplication and division facts. 	
	 Approximate decimals when solving practical problems. 	
	 Apply appropriate strategies to check answers. 	
2. Solve problems with and without a calculator.	2.1 Solve problems involving positive and negative numbers using the standard order of operations to solve multi- stage calculations.	N1.L2.5 N2/L2.6 N2/L2.10
	2.2 Solve problems efficiently involving whole numbers, fractions, decimals and percentages.	

- Work out a personal or family budget.
- Convert sums of money between currencies.
- Work out holiday spending.
- Convert amounts for cooking, for example a 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
1. Be able to work with money.	1.1 Calculate with sums of money.	MSS1/L2.1 MSS1/L2.6
	1.2 Use currency exchange	
	rates to convert between currencies.	
2. Be able to work with time.	2.1 Calculate, measure and record time in different formats and in complex contexts.	MSS1/L2.2
	2.2 Interpret dates and times written in different formats.	
	2.3 Select and use appropriate measuring instruments for different tasks, for example timers on appliances, clocks, watches.	
	2.4 State the relationship between units of time, for example. sec, min, hr, day, week, month, year.	
3. Be able to work with	3.1 Estimate, measure and	MSS1/L2.4
temperature.	compare temperature.3.2 Identify the different scales used to measure	WISS1/L2.6
	temperature.	
	from Celsius to	
	Fahrenheit and vice	



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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to work with whole numbers. 	 1.1 Read and write positive and negative numbers of any size. 1.2 Order and compare 	N1/L2.1
	positive and negative numbers of any size.	
2. Be able to work with	2.1 Order and compare	N2/L2.1
	2.2 Evaluate one number as a fraction of another.	NZ/ LZ.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	4.1 Order and compare	N2/ L2.7
percentages.	percentages.	N2/L2.8
	4.2 Recognise simple percentage increase and decrease.	N2/L2.9 N2/L2.2
	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 for example fractions, decimals and percentages are different ways of expressing the same thing. 	



- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 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 aumbals to be solutions. 	N1/L2.4 N1/L2.5
	words and symbols to produce results.	
2. Be able to work with ratios.	 2.1 Calculate ratio, for example 3:2. 2.2 Calculate direct proportion. 	N1/L2.3



- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 Be able to extract and use mathematical information. 	1.1 Extract discrete data from lists, tables, diagrams, charts and line graphs	HD1/L2.1
	 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.	
2. Be able to collect and organise data.	2.1 Collect discrete data in tests and from observations.	HD1/L2.2
	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.	
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	Additional information
	criteria	
	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	HD1/L2.2
	present results.	
	4.2 Represent discrete and	
	continuous data in	
	tables, charts, diagrams	
	and line graphs.	
	4.3 Draw conclusions from	
	and line graphs	
	4.4 Select and use	
	appropriate methods	
	and forms to present	
	and explain outcomes.	

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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
 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

- 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	This unit is based on the National Standards for Adult Numeracy and fully
standards	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	Additional information
	criteria	
 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 	MSS1/L2.3 MSS1/L2.4 MSS1/L2.5 MSS1/L2.6
	 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, for example 1in =2.54 cm.	
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. 	MSS1/L2.3 MSS1/L2.4 MSS1/L2.5 MSS1/L2.6
	 2.3 Read scales to different levels of accuracy including reading between marked divisions. 2.4 Calculate weight 	
	between systems using	



Learning outcomes	Assessment	Additional information
	criteria	
	conversion tables and	
	scales and approximate	
	conversion factors, for	
	example 1kg= 2.2lbs	
	and ounces to grams.	
3. Be able to measure	3.1 Estimate, measure and	MSS1/L2.3
capacity.	compare capacity using	MSS1/L2.4
	metric and imperial units.	MSS1/L2.5 MSS1/L2.6
	3.2 Calculate capacity with	
	units within the same	
	system.	
	3.3 Read scales to different	
	levels of accuracy	
	including reading	
	between marked	
	divisions.	
	3.4 Calculate capacity	
	between systems using	
	conversion tables and	
	scales and approximate	
	conversion factors, 107	
4 Ro able to work with	4.1 Recognize and name a	MSS1/L 2 7
shape positional	rance of 2-D	MSS1/L2.8
vocabulary and space	representations of 3-D	MSS1/L2.9
	shapes, for example in	MSS1/L2.10
	maps and plans.	MSS2/L2.1
	4.2 Solve problems involving	MSS2/L2.2 MSS2/L2.3
	mathematical properties,	1002/122.5
	2-D shapes and parallel	
	lines.	
	4.3 Draw 2-D shapes in	
	different orientations	
	using grids, for example	
	reflect and rotate.	
	4.4 Apply appropriate	
	formulae for finding	
	perimeters and areas of	
	regular shapes, for	
	example rectangular and	
	circular surfaces.	
	4.5 Apply appropriate	
	formulae for finding	
	areas of composite	



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

- 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	Measur	es, 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/L2.7 MSS1/L2.7 MSS1/L2.9 MSS1/L2.10 MSS2/L2.1 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

Suite of mathematics qualifications



Number		Number Measure shape and Space	
N2/ L2.5 N2/ L2.7 N2/ L2.8		MSS1/L2.10 MSS2/L2.1	
N2/ L2.9		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)
 Using Whole Numbers Be able to count and order whole numbers up to 10. 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. 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. Show understanding of the vocabulary of comparing numbers. Show understanding of ordinal numbers, for example first, second, third. 	 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 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 N1/E1.3 Order and compare numbers up to 10, including zero 	E1.1 Read, write, order and compare numbers up to 20 E1.2. Use whole numbers to count up to 20 items including zero
 Adding and Subtracting 1. Be able to add whole numbers. Add single-digit numbers with totals to 10. Interpret + and =. Use related vocabulary, for example and, plus, equals. 2. Be able to subtract whole numbers. 	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	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



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)
 Subtract single-digit numbers from numbers up to 10. Interpret - and =. Use related vocabulary, for example take away, minus, equals. Be able to solve everyday problems with and without a calculator. Identify and Interpret symbols +, -,= in practical situations. Estimate number of items (up to 10). Be able to use primary functions of a calculator. 	(total up to 10) N1/E1.6 Interpret + , - , = in practical situations N1/E1.2 Read and write numbers up to 10, including zero N1/E1.6 Interpret + , - , = in practical situations N1/E1.7 Estimate number of items (up to 10), e.g. How many pens are on the desk?	



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)
 Money and Time Know about money. Recognise and select different coins. Recognise and select different notes. Identify prices expressed in whole numbers up to 10. Know about time. Relate familiar events to different times, days, seasons. Demonstrate understanding of and use vocabulary related to time. 	MSS1/E1.1 Recognise and select coins and notes MSS1/E1.2 Relate familiar events to times of the day, days of the week, seasons of the year	 E1.5. Recognise coins and notes and write them in numbers (with the correct symbols (£ & p),) where these involve numbers up to 20 E1.7. Know the number of days in a week, months, and seasons in a year. Be able to name and sequence. E1.6. Read 12 hour digital and analogue clocks in hours.
 Using Size, Shape and Space 1. Know about size and weight. 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. 2. Know about shape, positional vocabulary and space. Identify common 2-D and 3-D shapes. Follow directions using everyday positional vocabulary, for example, between, inside, near to. 	 MSS1/E1.3 Describe and compare size of at least two items (length, width, height, weight, capacity) MSS1/E1.4 Describe and compare size of at least two items (length, width, height, weight, capacity) MSS1/E1.5 Describe and compare size of at least two items (length, width, height, weight, capacity) MSS1/E1.6 Describe and compare size of at least two items (length, width, height, weight, capacity) MSS1/E1.6 Describe and compare size of at least two items (length, width, height, weight, capacity) MSS2/E1.1 Recognise and name simple 2-D and 3-D shapes MSS2/E1.2 Follow directions using everyday positional vocabulary 	 E1.8. Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity E1.9. Identify and recognise common 2-D and 3-D shapes including circle cube rectangle (including circle cube rectangle cube rectangle cube rectangle (including circle cube rectangle cube rectangle cube rectangle cube rectangle (including circle cube rectangle cube rectangle cube rectangle cube rectangle cube rectangle (including circle cube rectangle cube



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)
 Using and Communicating Data Be able to extract information. Identify simple numerical information from a list. Be able to sort and classify objects. Identify criteria to sort familiar objects. Sort and classify objects using a single criterion. Make simple lists. Be able to present results. Use objects, simple images or whole numbers to present results. Use basic terms when identifying outcomes. 	 HD1/E1.1 Extract simple information from lists HD1/E1.2 Sort and classify objects using a single criterion; make simple lists HD1/E1.3 Construct simple diagrams 	 E1.11. Read numerical information from lists E1.12. Sort and classify objects using a single criterion E1.13. Read and draw simple charts and diagrams including a tally chart, block diagram/graph



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)
Using Whole Numbers and Fractions 1. Be able to work with whole numbers. Count reliably up to 100 items	N1/E2 1 Count up to 100 items	F21 Count reliably up to 100 items
Order numbers up to 100.Read whole numbers up to 100.	N1/E2.2 Read, write, order and compare numbers up to 100	E2.2. Read, write, order (and compare) numbers up to 200
 Write whole numbers up to 100. 2. Be able to work with fractions. 	N2/E2.1 Read, write and compare halves and	E2.10 . Recognise simple fractions (balves
 Recognise and use the words half and quarter and symbols ½ and ¼. Identify the relationship between a half and two 	quarters of quantities N2/E2.2 Find halves and quarters of small	quarters and tenths) of whole numbers and shapes
quarters.Find halves and quarters of small numbers of	numbers of items or shapes	E2.3. Recognise and sequence odd and even
items.		numbers up to 100
 Find halves and quarters of simple shapes. 		E2.11. Read, write and use decimals to one decimal place
Addition, Subtraction and Multiplication		
1. Be able to add and subtract whole numbers.	N1/E2 3 Add and subtract two-digit whole	F2.5 Add and subtract two-digit numbers
Add two-digit whole numbers.	numbers	
Subtract two-digit whole numbers.	N1/E2.4 Recall addition and subtraction facts to	E2.9. Approximate by rounding to the nearest
Round to the nearest 10.	10	10, and use this rounded answer to check
 Recall addition and subtraction facts to 10. 2 Be able to multiply whole numbers 	N1/E2.6 Round to nearest 10	results
 Multiply single-digit whole numbers. 	N1/E2.7 Interpret + , - , ×, = In practical	E2.6. Multiply whole numbers in the range 0x0
3. Be able to solve everyday problems with and	N1/E2.5 Multiply single-digit whole numbers	
without a calculator.		E2.4. Recognise and interpret the symbols $+, -,$
• Use and interpret +, - and = in practical situations	N1/E2.7 Interpret + , - , ×, = in practical	x, \div and = appropriately
to solve problems.	situations	
Use estimation in solving problems and to check if answers are sensible	N1/E2.9 Use estimation in solving problems and	
 Solve one step number and word problems. 		



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
		unit and/or adult numeracy core curriculum are
		highlighted in red)
Money, Time and Temperature		E2 12 Calculate manay with paper up to ano
 De able to work with money. Make amounts up to a pound using different. 	MSS1/F2 1 Make amounts up to £1 using coins	pound and in whole pounds of multiple items
 Make amounts up to a pound using unerent coins 	MSS1/E2.2 Calculate the cost of more than one	and write with the correct symbols (f or p)
 Calculate the cost in pence of more than one 	item: calculate the change from a transaction in	
item.	pence or in whole pounds	
Calculate the cost in whole pounds of more than		
one item.		
Calculate the change from a transaction in pence		
and whole pounds.		
2. Be able to work with time.	MSS1/E2 3 Read and record time in common	F2 13 Read and record time in common date
Read and record common date formats.	date formats	formats, and read time displayed on analogue
 Express time on analogue clocks in nours, nall, and understand time on 12 hour digital clocks in 	MSS1/E2.4 Read and understand time	clocks in hours, half hours and quarter hours,
hours half hours and quarter hours	displayed on analogue and 12-hour digital	and understand hours from a 24-hour digital
3. Know about temperature.	clocks (hours, half hours, quarter hours)	clock
Read positive temperatures in everyday	MSS1/E2.8 Read and compare positive	E2.17. Read and compare positive temperatures
situations, for example from a weather chart.	temperatures in everyday situations	E2.7 Know the number of hours in a day and
 Identify the unit of measurement for temperature in the UK. 		weeks in a year. Be able to name and sequence
 Compare temperatures in simple terms. 		
Using Size, Snape and Measure	MSS1/E2.5 Read, estimate, measure and	E2.14. Use metric measures of length including
I. De able to measure, estimate and compare	compare weight using common standard units;	millimetres, centimetres, metres and kilometres
 Measure length using common standard and 	length and capacity using common standard and	
non-standard units, for example metre.	non-standard units	E2 19 Deed and use simple sector to the
centimetre, paces, feet.		E2.10. Read and use simple scales to the
Estimate lengths.	MSS1/F2 10 Choose and use appropriate units	
Compare different lengths for example more than	and measuring instruments	
a metre, less than a metre.		



Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard (NB requirements which do not fully map to the upit and/or adult numeracy core curriculum are
		highlighted in red)
 Read simple scales for length to the nearest labelled division. Choose and use appropriate units and measuring instruments. Be able to measure, estimate and compare weight. 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. Be able to measure, estimate and compare capacity. Measure capacity, using common standard and non-standard units, for example litre, cupful. Estimate capacity for example more than a litre, less than a litre. Read simple scales for capacity to the nearest labelled division. 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. Kead simple scales for capacity to the nearest labelled division. Choose and use appropriate units and measuring instruments. Read simple scales for capacity and measuring instruments. Know about shape, positional vocabulary and space. Recognise and name common 2-D and 3-D shapes 	 MSS1/E2.6 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 MSS1/E2.9 Read simple scales to nearest labelled division MSS1/E2.9 Read simple scales to nearest labelled division MSS1/E2.10 Choose and use appropriate units and measuring instruments MSS1/E2.10 Choose and use appropriate units and measuring instruments MSS1/E2.10 Choose and use appropriate units and measuring instruments 	E2.15. Use measures of weight including grams and kilograms E2.16. Use measures of capacity including millilitres and litres
 Describe key properties of common 2-D and 3-D shapes 	objects	



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)
 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)
 Using and Communicating Data 1. Be able to extract information. 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. 	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	E2.22. Extract information from lists, tables, diagrams and bar charts E2.23. Make numerical comparisons from bar charts
 Be able to sort and classify objects. Sort and classify objects using two criteria for example size, colour, and shape. Be able to present information so it makes sense to others. Use straightforward means, such as tables, whole numbers, simple charts and diagrams to present results to others. 	 HD1/E2.3 Sort and classify objects using two criteria HD1/E2.4 Collect simple numerical information HD1/E2.5 Represent information so that it makes sense to others 	E2.24. Sort and classify objects using two criteria
		E2.25. Take information from one format and represent the information in another format including use of bar charts



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)
Using Whole Numbers, Decimals, Fractions and		
Percentages		
1. Be able to work with whole numbers.		
• Count up to 1000.	N1/E3.1 Count up to 1000 in multiples of 10 and	E3.6. Recognise and continue linear sequences
Order numbers up to 1000.	100	of numbers up to 100
Compare numbers up to 1000.		
Read whole numbers up to 1000.		
Write whole numbers up to 1000.		
2. Be able to work with fractions.		
• State the meaning of unit fractions, for example 1/5 1/8 1/10	N2/E3.1 Understand unit fractions, e.g. 1/5,	
Write common fractions.	1/10, 1/8	
Recognise and use fractions in equivalent forms.	N2/E3.2 Recognise and use common	
for example $5/10 = 1/2$.	percentages (e.g. 25%, 50%); and recognise	
3. Be able to work with percentages.	and use common fraction/decimal/ percentage	
Recognise and use common percentages, for	N2/F3 2 Recognise and use equivalent	
example 25%, 50%.	fractions, e.g. $5/1.0 = 1/2$	
Recognise and use common		
percentage/fraction/equivalences, for example ½,		
0.5, 50%.		
4. Be able to work with decimals.		E3.9. Recognise and continue sequences that
 State the meaning of decimals up to two decimal places 	N2/E3.3 Read, write and understand decimals	involve decimals
 Read up to two decimal places in practical 	(measures: one decimal place; money: two	
contexts, for example measure to one place and	decimal places)	
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.		



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)
 Making Calculations 1. Be able to add and subtract whole numbers. 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. 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. 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. 	 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 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 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/E3.4 Solve problems involving whole numbers and decimals 	



Measures, Shape and Space Entry 3

Unit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard
		unit and/or adult numeracy core curriculum are
Money, Time and Temperature		nignlighted in red)
 Be able to work with money. Add amounts of money using decimal notation. Subtract amounts of money using decimal notation. 	MSS1/E3.1 Add and subtract sums of money using decimal notation MSS1/E3.2 Round sums of money to nearest £ and 10p	E3.10. Calculate with money using decimal notation and express money correctly in writing in pounds and pence
 Round sums of money to the nearest £1 or 10p. Estimate and make approximate calculations relating to cost. Be able to work with time. Bead time in common formate on applaque. 	MSS1/E3.3 Read, measure and record time in common date formats, 12-hour and 24-hour clock	E3.11. Round amounts of money to the nearest £1 or 10p
 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 		E3.13. Read time from analogue and 24 hour digital clocks in hours and minutes
 3. Be able to work with temperature. Read temperature using standard units. Measure temperature in standard units. Compare temperatures. 	MSS1/E3.9 Read, measure and compare temperature using common units and instruments	E3.12. Read, measure and record time using am and pm See E3.14
Heing Size, Shane and Massures		
 1. Be able to read, measure, estimate and compare length. Estimate length and distance, using non-standard and standard units. 	MSS1/E3.4 Read and interpret distance in everyday situations MSS1/E3.5 Read, estimate, measure and compare length, weight and capacity using common and standard units	E3.14. Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division
 Compare length and distance, using non- standard units and standard units. Select and use appropriate units for measuring length. 	MSS1/E3.8 Choose and use appropriate units and measuring instruments	E3.15. Compare metric measures of length including millimetres, centimetres, metres and kilometres
 Select and use appropriate instruments for measuring length. Read and measure length and distance, using 		E3.18. Use a suitable instrument to measure



U	nit 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)
2. •	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. Be able to read, measure, estimate and compare weight. Estimate and compare weight, using non- standard and standard units. Select and use appropriate units for measuring weight. Select and use appropriate instruments for	MSS1/E3.6 Read simple scales to the nearest labelled and unlabelled division MSS1/E3.8 Choose and use appropriate units and measuring instruments	E3.16. Compare measures of weight including grams and kilograms
• 3. •	measuring weight. Read and measure weight using standard and non-standard units to the nearest labelled and unlabelled division. Be able to read, measure, estimate and compare capacity. Estimate and compare capacity. Select and use appropriate units for measuring capacity. Select and use appropriate instruments for	MSS1/E3.7 Read simple scales to the nearest labelled and unlabelled division MSS1/E3.8 Choose and use appropriate units and measuring instruments	E3.17. Compare measures of capacity including millilitres and litres
• 4. •	measuring capacity. Read and measure capacity using standard and non-standard units to the nearest labelled and unlabelled division. Know about shape, positional vocabulary and space. 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,	 MSS2/E3.1 Sort 2-D and 3-D shapes according to their properties (side length, angle, line of symmetry) MSS2/E3.2 Identify perimeter of simple shapes (rectangle, triangle) MSS2/E3.3 Follow directions using positional vocabulary (including the four compass points) 	E3.19. Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles



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)
 line of symmetry. Follow directions using positional vocabulary, including the four compass points. 		E3.20. Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns



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)
 Using and Communicating Data Be able to extract information. 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. 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. 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. 	 HD1/E3.1 Extract information from lists, tables, diagrams, bar and tally charts HD1/E3.2 Make numerical comparisons from bar charts and pictograms HD1/E3.3 Make observations and record numerical information using a tally HD1/E3.4 Organise and represent information in different ways so it makes sense to others 	 E3.21. Extract information from lists, tables, diagrams and charts and create frequency tables E3.23. Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts E3.22. Interpret information, to make comparisons and record changes, from different formats including bar charts and simple line
		graphs



Number Level 1

U	nit Details	Adult Numeracy Core Curriculum	Functional Skills (revised) standard
			unit and/or adult numeracy core curriculum are
			highlighted in red)
Ν	umbers, Decimals, Fractions and Percentages		
1.	Be able to work with numbers.		
•	Read and write positive numbers including large		
	numbers.	N1/L1.1 Read, write, order and compare any size	L1.1. Read, write, order and compare large
•	Order and compare positive numbers including	positive numbers	numbers up to one million
	large numbers.	N1/L1.2 Recognise negative numbers in practical	L1.2. Recognise and use positive and negative
•	Recognise negative numbers in practical contexts, for example temperatures	contexts, e.g. temperature	numbers
2.	Be able to work with fractions.		
•	Read and write common fractions and mixed		
	numbers.	N2/ L1.1 Read, write, order and compare common	L1.8. Read, write, order and compare common
•	Order and compare common fractions and mixed	fractions and mixed numbers, decimals to three	fractions and mixed numbers
	numbers.	decimal places and simple percentages, e.g. 5%,	
•	Express one number as a fraction of another, for	10%, 25%, 50%, 75%	
	example 10 as a fraction of 30.	N2/ L1.2 Find parts of whole number quantities or	110 Find fractions of whole number quantities or
٠	Use fractions to find parts of whole number	N2/L 1 12 Express one number as a fraction of	L1.9. Find fractions of whole number quantities of
	quantities or measurements, for example 2/3 or 3/4.	apother number e.g. What is 10 as a fraction of	measurements
3.	Be able to work with decimals.		
٠	Read and write decimals up to three decimal places	N2/ L1.4 Read, write, order and compare common	L1.10. Read, write, order and compare decimals
•	Order and compare decimals up to three decimal	fractions and mixed numbers, decimals to three	up to three decimal places
	places.	decimal places and simple percentages, e.g. 5%,	
4.	Be able to work with percentages.	10%, 25%, 50%, 75%	
•	Read and write simple percentages, Order and	N2/ L1.8 Read, write, order and compare common	L1.13. Read, write, order and compare
	compare simple percentages.	decimal places and simple percentages, e.g. 5%	1114 Calculate percentages of quantities
•	Recognise simple percentage increase and	10% 25% 50% 75%	including simple percentage increases and
	decrease.	N2/L1.9 Find simple percentage parts of	decreases by 5% and multiples thereof
•	Find simple percentage parts of quantities and	quantities and measurements	L1.19. Calculate discounts in multiples of 5% on
	measures.	N2/ L1.10 Find simple percentage increase and	amounts of money
•	Recognise common percentage, fraction and	decrease	
	decimal equivalences.		



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)
Use equivalences to find part or whole number quantities.	N2/L1.3 Recognise common fraction, percentage and decimal equivalents and use these to find part or whole-number quantities	L1.16. Recognise and calculate equivalences between common fractions, percentages and decimals
 Making Calculations Be able to add and subtract whole numbers and decimals. 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. 2. Be able to multiply and divide whole numbers and 	 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 	L1.11. Add, subtract, multiply and divide decimals up to two decimal places
 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 	 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 	L1.12. Approximate by rounding to a whole number or to one or two decimal placesL1.3. Multiply and divide whole numbers and decimals by 10, 100, 1000
calculations. 3. Be able to solve problems with and without a calculator.		L1.15. Estimate answers to calculations using fractions and decimals



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)
 Solve problems involving positive numbers using the standard order of operations to solve multi-step calculations. Solve problems involving whole numbers, fractions decimals and percentages. Use an electronic or mechanical aid to calculate efficiently using whole numbers fractions, decimals and percentages. Check calculations using an electronic or mechanical aid. 	N2/L1.10 Find simple percentage increase and decrease	L1.7. Follow the order of precedence of operator
 Numerical Relationships, Algebra and Ratios 1. Know about numerical relationships. Recognise multiples of 2 to 9, up to 100. Recognise multiples of 10, 50, 100, 1000. Know square numbers up to 10 x10. Identify factors of numbers. Recall multiplication facts up to 10x10 and make connections with division facts. 2. Be able to solve problems involving algebra. Form word expressions from simple expressions in 	N1/L1.5 Tables to 10 × 10 N1/L1.6 Identify multiples and square numbers	 L1.6. Calculate the squares of one-digit and two-digit numbers L1.4. Use multiplication facts and make connections with division facts
 symbols. Evaluate simple expressions and formulae. Translate simple word problems into symbols, +, -, ÷, x and numbers. Be able to work with ratios. Work out simple ratio as the number of parts. Explain direct proportion as the same rate of 	N1/L1.11 Form word expressions from simple expressions in symbols; evaluate simple expressions and formulae	L1.5. Use simple formulae expressed in words for one or two-step operations
 Use understanding of direct proportion to make simple calculations. 	N1/L1.7 Calculate simple ratio and direct proportion	L1.17. Work with simple ratio and direct proportions



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
		highlighted in red)
Money, Time and Temperature		
1. Be able to work with money.		
Add and subtract sums of money including through	MSS1/L1.1 Add, subtract, multiply, divide sums of	
use of columns with decimal point aligned.	money and record	
Multiply and divide sums of money.	MSS1/L1.6 Add and subtract common units of	
Record sums of money, using appropriate conventions.	measure within the same system	
2. Be able to work with time.		
 Read time in common formats, on analogue clocks and 12 and 24 hour digital clocks and timetables. 	MSS1/L1.2 Read and measure time accurately and use timetables	
 Use different instruments to measure time in days. 	MSS1/L1.3 Calculate using time in familiar	
hours, minutes and seconds.	contexts	
Record time in common formats and using 12 and		
24 hour formats.		
 Add and subtract times in hours and minutes. 		
Convert units of time.		
3. Be able to work with temperature.	MSS1/L1.4 Read, estimate, measure and	
Read, estimate, measure and compare	compare distance, length, weight, capacity and	
temperature using common units and instruments.	temperature	
Read temperature scales to the nearest labelled and uploballed division		
Using Size, Shape and Space		1 1 20 Convert between units of length weight
1. Be able to measure length and distance.	MSS1/I 1 4 Read estimate measure and	capacity money and time in the same system
Choose and use appropriate instruments for	compare distance length weight capacity and	capacity, money and time, in the same system
measuring length and distance.	temperature.	
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		



Ur	it 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)
	distance.		
•	Convert units of measure in the same system.	MSS1/L1.6 Add and subtract common units of	
2.	Be able to measure weight.	measure within the same system	
•	Choose and use appropriate instruments for	MSS1/L1.7 Convert units of measure in the same	
	measuring weight.	system	
•	Choose and use appropriate units for measuring weight.		
•	Read scales to the nearest labelled and unlabelled	MSS1/L1.4 Read, estimate, measure and	
	division.	compare distance, length, weight, capacity and	
٠	Add and subtract units of measure for weight.	temperature.	
٠	Convert units of measure in the same system.		
3.	Be able to measure capacity.	MSS1/L1.6 Add and subtract common units of	
٠	Choose and use appropriate instruments for	MSS1/L17 Convert units of modeuro in the same	
	measuring capacity.	system	
٠	Choose and use appropriate units for measuring	system	
	capacity.		
•	Read scales to the nearest labelled and unlabelled division.		
٠	Add and subtract units of measure for capacity.	MSS1/I 1 4 Read estimate measure and	
٠	Convert units of measure in the same system.	compare distance, length, weight, capacity and	
4.	Be able to work with shape, positional vocabulary	temperature	
	and space.	MSS1/L1.6 Add and subtract common units of	
٠	Solve problems using the mathematical properties	measure within the same system	
	of regular 2-D shapes.	MSS1/L1.7 Convert units of measure in the same	
•	Draw 2-D shapes in different orientations using	system	
	grids, for example in diagrams or plans.		L1.24. Draw 2-D shapes and demonstrate an
•	Work out the perimeter of simple shapes.		understanding of line symmetry and knowledge of
•	Work out the velume of changes.		the relative size of angles
•	vvork out the volume of snapes, for example	MSS1/L1.8 Work out perimeter of simple shapes	L1.22. Calculate the area and perimeter of simple
	Cubulus.	(rectangle, equilateral triangle)	snapes including those that are made up of a
•	shapes for example 1cm represents 1m	MSS1/L1.9 Work out area of rectangles	Combination of rectangles
•	Work out the volume of shapes, for example cuboids. Work out dimensions from drawings with simple shapes, for example 1cm represents 1m	MSS1/L1.8 Work out perimeter of simple shapes (rectangle, equilateral triangle) MSS1/L1.9 Work out area of rectangles MSS1/L1.10 Work out volume, e.g. cuboids	L1.22. Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles



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)
 Follow directions using appropriate positional vocabulary, including the eight compass points. 	 MSS1/L1.11 Work out dimensions from drawings with simple shapes, e.g. 1cm represents 1m MSS2/L1.1 Solve problems using mathematical properties of regular 2-D shapes (tessellation or symmetry) MSS2/L1.2 Draw 2-D shapes in different orientations using grids, e.g. in diagrams or plans 	cuboids L1.21. Recognise and make use of simple scales on maps and drawings L1.26. Use angles when describing position and direction, and measure angles in degrees
		L1.25. Interpret plans, elevations and nets of simple 3-D shapes



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)
Using and Communicating Data		
1. Be able to extract and interpret information.	HD1/L1.1 Extract and interpret information, e.g.	
• Use understanding of title, labels and simple scales	tables, diagrams, charts, simple line graphs	
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.		
2. Be able to collect and organise data.		
Identify appropriate methods for collecting data.	HD1/I 1.2 Collect organise and represent discrete	
Collect discrete data in tests and from	data e a tables diagrams charts line granbs	
Observations.	HD1/L1.3 Find the mean for a set of data	L1.28. Group discrete data and represent grouped
Organise discrete data so that it can be easily transferred into a quitable format for aboring	HD1/L1.4 Find the range for a set of data	data graphically
Find the arithmetical everage (mean) for a set of		L1.29. Find the mean and range of a set of
 Find the antimetical average (mean) for a set of data 		quantities
 Find the arithmetical range for a set of data 		
 State how very high or low learners can distort the 		
average (mean)		
3. Be able to present results		
Use whole numbers, decimals and fractions and		L1.27. Represent discrete data in tables, diagrams
percentages to present results.		and charts including pie charts, bar charts and line
Represent data in tables, charts, diagrams and line	HD1/L12 Collect organize and represent discrete	graphs
graphs, to support the understanding of others.	data o a tables diagrams charts line graphs	
Select suitable methods, format and scale to	data, e.g. tables, diagrams, charts, line graphs	
present and describe outcomes.		
Using Probability		
1. Know about probability.		L1.30. Understand probability on a scale from
Use the vocabulary of probability to talk about the		0 (impossible) to 1 (certain) and use
likelihood of events and possible outcomes.		probabilities to compare the likelihood of
Show understanding that some events are certain		



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)
 to happen and some impossible. 2. Be able to calculate and express probability. 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. 	HD2/L1.1 Use the vocabulary of probability to discuss the likelihood of events	events L1.31. Use equally likely outcomes to find the probabilities of simple events and express them as fractions
	HD2/L1.2 Express the likelihood of an event using fractions, decimals and percentages, with the probability scale of 0 to 1	



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)
 Numbers, Fractions, Decimals and Percentages Be able to work with whole numbers. 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. Order and compare amounts or quantities. Evaluate one number as a fraction of another. Be able to work with decimals. Order, approximate and compare decimals to solve practical problems. Be able to work with percentages. Order and compare percentages. Find percentage parts of quantities and measurements. Evaluate one number as a percentage of another. 	 N1/L2.1 Order and compare any size positive and negative numbers 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 N2/L2.5 Round decimals when solving practical problems 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 	 L2.1. Read, write, order and compare positive and negative numbers of any size L2.7. Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers L2.8. Express one number as a fraction of another L2.9. Order, approximate and compare decimals L2.6. Calculate percentage change (any size increase and decrease), and original value after percentage change 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
 Making Calculations 1. Be able to carry out calculations when solving problems. 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 	N1/L2.2 Add and subtract positive and negative numbers using efficient written and mental methods N2/L2.4 Add and subtract fractions	 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



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)
 decimals up to 3 places using efficient written and mental methods. 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. Solve problems with and without a calculator. 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. 	N1/L2.5 Solve problems involving positive and negative numbers, using the standard order of operations to solve multi-stage calculations N2/L2.6 Use estimation to find appropriate solutions to problems and check if solutions are sensible N2/L2.10 Solve problems efficiently involving	L2.12. Follow the order of precedence of operators, including indices
 Numerical Relationships, Algebra and Ratio Be able to solve problems involving algebra. 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. Be able to work with ratios. Calculate ratio, for example 3:2. Calculate direct proportion. 	 whole numbers, fractions, decimals and percentages 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 N1/L2.5 Solve problems involving positive and negative numbers, using the standard order of operations to solve multi-stage calculations N1/L2.3 Calculate ratio and direct proportion 	 L2.3. Evaluate expressions and make substitutions in given formulae in words and symbols L2.11. Understand and calculate using ratios, discussed in the properties.



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)
Money, Time and Temperature		
1. Be able to work with money.		
 Calculate with sums of money. 	MSS1/L2.1 Calculate with money; convert	L2.13. Calculate amounts of money, compound
Use currency exchange rates to convert between	between currencies	interest, percentage increases, decreases and
currencies.	MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors	discounts including tax and simple budgeting
2 Be able to work with time	MSS1/L2.2 Calculate, measure and record time in	
Calculate, measure and record time in different	complex contexts	
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		
3 Be able to work with temperature		
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.		
Using Size Shane and Susse		
Using Size, Snape and Space		L2.14. Convert between metric and imperial
De able to measure length. Estimate measure and compare length and	MSS1/L2.4 Estimate, measure and compare	units of length, weight and capacity using a) a
distance using metric and imperial units	length, distance, weight, capacity and	conversion factor and b) a conversion graph
 Calculate length and distance, using units within 	temperature, using metric, or imperial units where	



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)
 the same system. 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 1in =2.54 cm. 	appropriate MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors	
 Be able to measure weight. 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. 	MSS1/L2.3 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate MSS1/L2.4 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate MSS1/L2.5 Calculate with units of measure within	
 Be able to measure capacity. 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. 	 MSS1/L2.3 Calculate with units of measure within the same system MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors MSS1/L2.3 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate MSS1/L2.4 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate 	
4. Be able to work with shape, positional vocabulary and space.	appropriate MSS1/L2.5 Calculate with units of measure within the same system	



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)
 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. 	 MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors MSS1/L2.3 Read scales to different levels of accuracy including reading between marked divisions MSS1/L2.4 Estimate, measure and compare length, distance, weight, capacity and temperature, using metric, or imperial units where appropriate MSS1/L2.5 Calculate with units of measure within the same system MSS1/L2.6 Calculate within units of measure between systems, using conversion tables, graphs and scales, and approximate conversion factors 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 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 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 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 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 MSS1/L2.10 Work out dimensions from scale drawings; understand scale written as a ratio MSS2/L2.1 Recognise and name a range of 2-D 	 L2.20. Understand and use common 2-D representations of 3-D objects 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) 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) L2.18. Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements



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)
	representations of 3-D shapes, e.g. in maps and plans MSS2/L2.2 Solve problems involving mathematical properties, 2-D shapes and parallel lines MSS2/L2.3 Draw 2-D shapes in different orientations using grids, e.g. reflect and rotate	 L2.15. Calculate using compound measures including speed, density and rates of pay L2.21. Draw 3-D shapes to include plans and elevations L2.22. Calculate values of angles and/or coordinates with 2-D and 3-D shapes L2.19. Use coordinates in 2-D, positive and negative, to specify the positions of points



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
Using and Communicating Data		highlighted in red)
Using and Communicating Data		
information		
Extract discrete data from lists, tables, disgrams	HD1/I 2.1 Extract and interpret discrete and	
• Extract discrete data from lists, tables, diagrams,	continuous data from tables diagrams charts and	
 Extract continuous data from lists tables diagrams 	line graphs	
charts and line graphs		
 Interpret and use continuous and discrete data from 		
lists, tables, diagrams, charts and line graphs.		
2. Be able to collect and organise data.		
Collect discrete data in tests and from		
observations.		
Collect continuous data in tests and from	HD1/L2.2 Collect, organise and represent discrete	
observations.	and continuous data, e.g. tables, diagrams, charts,	
Identify appropriate methods for collecting discrete	line graphs	
and continuous data.		
Organise discrete data.		
Organise continuous data.		
3. Be able to compare data.	HD1/L2.3 Find mean, median, and mode; use	L2.23. Calculate the median and mode of a set of
• Find the mean, median and the mode.	them to compare two sets of data as appropriate	quantities
Use the mean, median and the mode as		L2.25. Use the mean, median, mode and range to
appropriate to compare data.	HD1/L2.4 Find the range; use range to describe	compare two sets of data
Find the range in sets of data.	the spread within sets of data	
Use the range to describe the spread within sets of		
data.		
• Explain now high or low values can distort a data		
A Be able to present results		
Ise whole numbers decimals and fractions and		
percentages to present results	HD1/L22 Collect organise and represent discrete	1228 Draw and interpret scatter diagrams and
Represent discrete and continuous data in tables,		



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)
 charts, diagrams and line graphs. Draw conclusions from tables, charts, diagrams and line graphs. Select and use appropriate methods and forms to present and explain outcomes. 	and continuous data, e.g. tables, diagrams, charts, line graphs	recognise positive and negative correlation
 Using Probability 1. Know about probability. 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. Calculate probability for independent and combined events. Record the range of possible outcomes of combined events in tree diagrams or in tables. 	 HD2/L2.1 Identify the range of possible outcomes of combined events and record using diagrams or tables HD2/L2.1 Identify the range of possible outcomes of combined events and record using diagrams or tables 	 L2.26. Work out the probability of combined events including the use of diagrams and tables, including two-way tables L2.27. Express probabilities as fractions, decimals and percentages L2.24. Estimate the mean of a grouped frequency distribution from discrete data



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