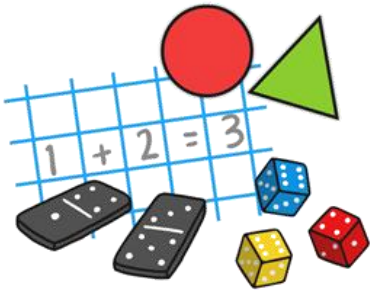
Functional Maths EL1-3

Long Term Plan



Maths

Post 16

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Entry Level 1

Purpose

Learners at Entry Level 1 are expected to be able to use the knowledge and skills listed in the subject content to recognise a simple mathematical problem and obtain a solution. A simple mathematical problem is one which requires working through one step or process.

At Entry Level 1 it is expected that students will be able to address individual problems each of which draw upon knowledge and/or skills from one mathematical content area (i.e. number and the number system; common measures, shape and space; information and data).

Tutors/assessors may read questions to the learner and record responses on the assessment mark sheet for the learner if necessary, in accordance with the Reasonable Adjustment guidelines, all adjustments must be kept with the assessment and will inform the Internal Quality Assurance and the External Quality Assurance activities. The language used on the assessment paper is clear and straightforward. Learners may use calculators for Part B only.

The mark scheme specifies the performance evidence that is necessary to achieve the full range of marks. The assessment papers indicate how many marks are available for each task.

No pre-release material is used. Learners must complete the assessment in the allocated time.

Additional Assessment Requirements

To achieve the qualification, the learner must achieve a pass in the assessment taken. Where a learner has not yet met the subject content to be awarded a pass, a result of fail will be issued.

Subject Content	Assessment/Success Criteria
Using numbers and the number system – Whole numbers	1. Read, write, order and compare numbers up to 20 2. Use whole numbers to count up to 20 items including zero 3. Add numbers which total up to 20, and subtract numbers from numbers up to 20 4. Recognise and interpret the symbols +, – and = appropriately
Using common measures, shape and space	5. Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20 6. Read 12 hour digital and analogue clocks in hours 7. Know the number of days in a week, months, and seasons in a year. Be able to name and sequence 8. Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity 9. Identify and recognise common 2-D and 3-D shapes including circle, cube, rectangle (incl. square) and triangle 10. Use every day positional vocabulary to describe position and direction including left, right, in front, behind, under and above
Handling information and data	11. Read numerical information from lists 12. Sort and classify objects using a single criterion 13. Read and draw simple charts and diagrams including a tally chart, block diagram/graph

Solving mathematical problems and decision making

Entry Level 1 students are expected to be able to use the knowledge and skills listed above to recognise a simple mathematical problem and obtain a solution. A simple mathematical problem is one which requires working through one step or process.

At Entry Level 1 it is expected that students will be able to address individual problems each of which draw upon knowledge and/or skills from one mathematical content area (i.e. number and the number system; common measures, shape and space; information and data).	
Solving mathematical problems and decision making	Entry Level 1 students are expected to be able to: • Use given mathematical information and recognise and use simple mathematical terms appropriate to Entry Level 1; • Use the methods given above to produce, check and present results that make sense; and • Provide a simple explanation for those results. The context for simple problems at this level should be familiar to all students and easily described.

Entry Level 2

Purpose

Learners at Entry Level 2 are expected to be able to use the knowledge and skills listed in the subject content to recognise a simple problem and obtain a solution. A simple problem is one which requires working through one step or process.

At Entry Level 2 it is expected that students will be able to address individual problems each of which draw upon knowledge and/or skills from one mathematical content area (i.e. number and the number system; common measures, shape and space; information and data).

Tutors/assessors may read questions to the learners if required in accordance with the Reasonable Adjustment guidelines, all adjustments must be kept with the assessment and will inform the Internal Quality Assurance and the External Quality Assurance activities. The language used on the assessment paper is clear and straightforward. Learners may use calculators on Part B only.

The mark scheme specifies the performance evidence that is necessary to achieve the full range of marks. The assessment papers indicate how many marks are available for each task.

No pre-release material is used. Learners must complete the assessment in the allotted time.

Additional Assessment Requirements

To achieve the qualification, the learner must achieve a pass in the assessment taken. Where a learner has not yet met the subject content to be awarded a pass, a result of fail will be issued.

Subject Content	Assessment/Success Criteria
Using numbers and the number system – Whole numbers, fractions, and decimals	1. Count reliably up to 100 items 2. Read, write, order and compare numbers up to 200 3. Recognise and sequence odd and even numbers up to 100 4. Recognise and interpret the symbols +, – , x, ÷ and = appropriately 5. Add and subtract two-digit numbers 6. Multiply whole numbers in the range 0x0 to 12x12 (times tables) 7. Know the number of hours in a day and weeks in a year. Be able to name and sequence 8. Divide two-digit whole numbers by single-digit whole numbers and express remainders 9. Approximate by rounding to the nearest 10, and use this rounded answer to check results 10. Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes 11. Read, write and use decimals to one decimal place
Using common measures, shape, and space	12. Calculate money with pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p) 13. Read and record time in common date formats, and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour 14. digital clock 15. Use metric measures of length including millimetres, centimetres, metres and kilometres 16. Use measures of weight including grams and kilograms 17. Use measures of capacity including millilitres and litres 18. Read and compare positive temperatures 19. Read and use simple scales to the nearest labelled division 20. Recognise and name 2-D and 3-D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres

	21. Describe the properties of common 2-D and 3-D shapes including numbers of sides, corners, edges, faces, angles and base
Handling information and data	22. Extract information from lists, tables, diagrams and bar charts 23. Make numerical comparisons from bar charts 24. Sort and classify objects using two criteria 25. Take information from one format and represent the information in another format including use of bar charts
Solving mathematical problems and decision making Entry Level 2 students are expected to be able to use the knowledge and skills listed above to recognise a simple problem and obtain a solution. A simple problem is one which requires working through one step or process. At Entry Level 2 it is expected that students will be able to address individual problems each of which draw upon knowledge and/or skills from one mathematical content area (i.e. number and the number system; common measures, shape and space; information and data).	
Solving mathematical problems and decision making	Entry Level 2 students are expected to be able to: • Use given mathematical information including numbers, symbols, simple diagrams and charts; • Recognise, understand and use simple mathematical terms appropriate to Entry Level 2; • Use the methods given above to produce, check and present results that make sense; and • Present appropriate explanations using numbers, measures, simple diagrams, simple charts and symbols appropriate to Entry Level 2. The context for simple problems at this level should be familiar to all students and easily described.

Entry Level 3

Purpose

Learners at Entry Level 3 are expected to be able to use the knowledge and skills listed in the subject content to recognise a simple problem and obtain a solution. A simple problem is one which requires working through one step or process.

At Entry Level 3 it is expected that students will be able to address individual problems each of which draw upon knowledge and/or skills from one mathematical content area (i.e. number and the number system; common measures, shape and space; information and data).

Tutors/assessors may read questions to the learners if required in accordance with the Reasonable Adjustment guidelines, all adjustments must be kept with the assessment and will inform the Internal Quality Assurance and the External Quality Assurance activities. The language used on the assessment paper is clear and straightforward. Learners may use calculators on Part B only.

The mark scheme specifies the performance evidence that is necessary to achieve the full range of marks. The assessment papers indicate how many marks are available for each task.

No pre-release material is used. Learners must complete the assessment in the allotted time.

Additional Assessment Requirements

To achieve the qualification, the learner must achieve a pass in the assessment taken. Where a learner has not yet met the subject content to be awarded a pass, a result of fail will be issued.

Subject Content	Assessment/Success Criteria
Using numbers and the number system – Whole numbers, fractions, and decimals	1. Count, read, write, order and compare numbers up to 1000 2. Add and subtract using three-digit whole numbers 3. Divide three-digit whole numbers by single and double digit whole numbers and express remainders 4. Multiply two-digit whole numbers by single and double digit whole numbers 5. Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results 6. Recognise and continue linear sequences of numbers up to 100 7. Read, write and understand thirds, quarters, fifths and tenths including equivalent forms 8. Read, write and use decimals up to two decimal places 9. Recognise and continue sequences that involve decimals
Using common measures, shape, and space	10. Calculate with money using decimal notation and express money correctly in writing in pounds and pence 11. Round amounts of money to the nearest £1 or 10p 12. Read, measure and record time using am and pm 13. Read time from analogue and 24 hour digital clocks in hours and minutes 14. Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division 15. Compare metric measures of length including millimetres, centimetres, metres and kilometres 16. Compare measures of weight including grams and kilograms 17. Compare measures of capacity including millilitres and litres 18. Use a suitable instrument to measure mass and length 19. Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles

Handling information and data	20. Extract information from lists, tables, diagrams and charts and create frequency tables 21. Interpret information, to make comparisons and record changes, from different formats including bar charts and simple line graphs 22. Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts
Solving mathematical problems and decision making Entry Level 3 students are expected to be able to use the knowledge and skills listed above to recognise a simple problem and obtain a solution. A simple problem is one which requires working through one step or process. At Entry Level 3 it is expected that students will be able to address individual problems each of which draw upon knowledge and/or skills from one mathematical content area (i.e. number and the number system; common measures, shape and space; information and data).	
Solving mathematical problems and decision making	Entry Level 3 students are expected to be able to: • Use given mathematical information including numbers, symbols, simple diagrams and charts; • Recognise, understand and use simple mathematical terms appropriate to Entry Level 3; • Use the methods given above to produce, check and present results that make sense to an appropriate level of accuracy; and • Present results with appropriate and reasoned explanation using numbers, measures, simple diagrams, charts and symbols appropriate to Entry Level 3. The context for simple problems at this level should be familiar to all students.

Opportunities for solving mathematical problems and decision making

Entry Level 1

Entry Level 1 learners are expected to be able to:

- use given mathematical information and recognise and use simple mathematical terms appropriate to Entry Level 1
- use the methods given above to produce, check and present results that make sense
- provide a simple explanation for those results.

The context for simple problems at this level should be familiar to all learners and easily described.

Entry Level 2

Entry Level 2 learners are expected to be able to:

- use given mathematical information, including numbers, symbols, simple diagrams and charts
- recognise, understand and use simple mathematical terms appropriate to Entry Level 2
- use the methods given above to produce, check and present results that make sense
- present appropriate explanations using numbers, measures, simple diagrams, simple charts and symbols appropriate to Entry Level 2.

The context for simple problems at this level should be familiar to all learners and easily described.

Entry Level 3

Entry Level 3 learners are expected to be able to:

- use given mathematical information, including numbers, symbols, simple diagrams and charts
- recognise, understand and use simple mathematical terms appropriate to Entry Level 3
- use the methods given above to produce, check and present results that make sense to an appropriate level of accuracy
- present results with appropriate and reasoned explanation using numbers, measures, simple diagrams, charts and symbols appropriate to Entry Level 3.

The context for simple problems at this level should be familiar to all learners.

Entry Level 1 LTP –
Using numbers and the number system
1 & 2 whole numbers

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers 1. Read, write, order and compare numbers up to 20 2. Use whole numbers to count up to 20 items including zero	• Recognise numerals from 0 to 10. • Know the value of numerals from 0 to 10. • Use numerals from 0 to 10. • Compare two given numbers of objects in groups of up to ten. • Use ordinal numbers from first to tenth, when describing position in a sequence of numbers. • Count reliably up to ten.	The learner should be able to: • recognise the numerals 0–20 • read numbers up to 20, including zero • understand numbers can be represented in different ways, e.g. Roman numerals • write numbers up to 20, including zero • recognise numbers written in different fonts and styles • order and compare numbers up to 20 including zero • understand the relative position in a sequence of numbers, e.g. first, second, third • count reliably up to 20 items • understand that if items are rearranged the number stays the same • know how to count on and back from any number below 20.	• Read numbers in everyday documents and contexts, e.g. signs, notices, adverts, posters. • Match numbers in words and numerals. • Match missing numbers in a sequence. • Rearrange numbers in order. • Count items, rearrange them and count them again. • Count on from 0 starting with a different number, up to 20.
Key Words	digits, units, tens, difference, order, compare, most, least, fewest, greatest, smallest		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Select the correct number floor button in a lift. ✓ Count the items in a delivery. ✓ Count the number of children in a group. ✓ Find the smallest number in a context list of numbers below 20. ✓ Find the highest number in a context list of number below 20.		

	Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Count the number of boys and girls in a mixed group. ✓ Given a list of 4 people's names and the number of days holiday each person has left, order the number of days holiday from most to least Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Are there more boys than girls in the group? ✓ Who has the most days of holiday left?

3 & 4 whole numbers Adding

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers 3. Add numbers which total up to 20 4. Recognise and interpret the symbols + and = appropriately	• Add single-digit numbers • Recognise and interpret + and = • Check by counting	The learner should be able to: • recognise the numerals 0–20 • add single and two-digit whole numbers with totals to 20 • understand the operation of addition and related vocabulary • understand addition gives the same result irrespective of the order in which two or more numbers are placed • know the symbols + and = • understand + represents the operation of addition • understand = represents equality and related vocabulary • understand how to check calculation using whole numbers 0–20.	• Identify different words used for addition. • Use different strategies for mental addition. • Find the pairs of numbers up to 20. • Use a number line for addition by counting on. • Understand the order in which to key in numbers and operations when using a calculator. • Be able to clear the display of a calculator and know this should be done before starting a new calculation.
Key Words	digit, units, tens, add, plus, sum of, total, equals, is equal to, is the same as		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find the number of cans in a full box and the number of cans on a shelf. ✓ Find the number of males and females in a group. ✓ Find the number of items, within a context group, that need to be added together. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Find the total of cans in a full box of twelve plus three cans on the shelf. ✓ Find the total number of males and females in a group. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g.		

	✓ Confirm the total number of cans is the amount required. Confirm there are enough chairs for the total number within the group.

3 & 4 whole numbers Subtracting

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers 3. Subtract numbers which total up to 20 4. Recognise and interpret the symbols - and = appropriately	• Subtract single-digit numbers • Recognise and apply − and = • Check by counting	The learner should be able to: • recognise the numerals 0–20 • subtract single and two-digit numbers from numbers up to 20 • understand the operation of subtraction and relevant vocabulary • understand that a whole number can only be subtracted from itself or from a larger number • understand that subtracting zero leaves a number unchanged • know the symbols − and = • understand − represents the operation of subtraction • understand = represents equality and related vocabulary • understand how to check calculation using whole numbers 0–20	• Identify different words used for subtraction. • Use different strategies for mental subtraction. • Subtract numbers from 20 and compare with the pairs of numbers totalling 20. Identify patterns. • Use a number line for subtraction by counting back. • Understand the order in which to key in numbers and operations when using a calculator. • Be able to clear the display of a calculator and know this should be done before starting a new calculation.
Key Words	digits, units, tens, difference, take away, subtract, less than, equals, is equal to, is the same as		

Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Identify the number of items within a context. ✓ Identify the number of eggs in a recipe. ✓ Identify the number of bread rolls to serve guests. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Work out the shortfall in numbers within a context. ✓ Work out the shortfall of eggs in the cupboard and eggs required in a recipe. ✓ Work out the shortfall of bread rolls in a box and those needed to serve guests. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Make a decision about how many more items are required. ✓ Make a decision about how many more eggs are required. ✓ Make a decision about how many more bread rolls are required.

Using common measures, shape and space

5 Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 5. Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20	• Recognise and select coins up to 20p • Recognise and select notes up to £10	The learner should be able to: • recognise and select coins and notes • write money amounts up to 20, using the correct symbols • know the names and value of coins and notes involving numbers up to 20.	• Select coins to match requirements in given situations. • Exchange coins and notes for equivalent value up to 20.
Key Words	pounds, pence, coin, note		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find the cost of an item on a price list. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Choose the correct coins to purchase the item. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. Confirm whether the value of another item on the list is more or less than the one selected.		

6 Read 12 hour digital and analogue clocks in hours

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 6. Read 12 hour digital and analogue clocks in hours	• Relate familiar events to the names of significant times in the day	The learner should be able to: • understand and use vocabulary related to the time of day • understand the times are repeated in the 12-hour clock • understand and use a.m. and p.m. • understand that analogue clock faces can be marked in different ways • read the position of the hands on a clock face • understand that a digital clock shows hours (and minutes).	• understand and use vocabulary related to the time of day • understand the times are repeated in the 12-hour clock • understand and use a.m. and p.m. • understand that analogue clock faces can be marked in different ways • read the position of the hands on a clock face • understand that a digital clock shows hours (and minutes).
Key Words	o'clock, midday, digital clocks, analogue clocks		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find programme times in listings for television, radio and cinema. ✓ Identify the correct given time for an event from an event fixture list. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Match the time of a programme to an analogue and/or digital clock. ✓ Match the time of an event to an analogue and/or digital clock. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Decide whether the programme finishes before a given time. Decide whether the event finishes before the start of another given event.		

7 Know the number of days in a week, months, and seasons in a year; be able to name and sequence

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 7. Know the number of days in a week, months, and seasons in a year; be able to name and sequence	• Relate familiar events to the names of the days of the week	The learner should be able to: • know the days of the week and their order • know the months of the year and their order • know the seasons of the year and their order.	• Use vocabulary of the different days of the week, weekday and weekend in different contexts. • Use vocabulary, i.e. different times of day, weekday, weekend. • Use a TV listing to find out about the programmes on a given day. • Mark events on a weekly planner. • Match the months in words to their abbreviations. • Use a standard calendar to find different days or dates. • Identify events in the four seasons, e.g. New Year, religious festivals, public holidays.
Key Words	days, months, seasons, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, January, February, March, April, May, June, July, August, September, October, November, December, Spring, Summer, Autumn, Winter		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Choose a day and time for a training session. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Mark given events on a weekly planner. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Decide when an activity or event takes place.		

8 Describe and make comparisons in words between measures of items including size, length, width, height

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 8. Describe and make comparisons in words between measures of items including size, length, width, height	• Describe and compare marked differences in size between two items using simple comparative vocabulary such as large, big, small • Describe and compare marked differences in lengths and heights of two items using simple comparative vocabulary such as long, short, tall	The learner should be able to: • describe size • use direct comparisons for the size of at least two items • understand and use vocabulary related to size • describe length, width and height • use direct comparisons for length, width and height • understand vocabulary related to length, width and height.	• Compare the length, width and height of different objects. • Compare the length of objects and decide if they are longer, shorter or the same length. • Consider the size of a room using correct vocabulary, e.g. length, long, width, wide, height, high.
Key Words	size, length, width, height, large, larger, largest, small, smaller, smallest, long, longer, longest, short, shorter, shortest, wide, wider, widest, narrow, narrower, tall, taller, tallest		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Sort objects in order of size, e.g. boxes, bottles, clothes. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Compare the length, width and height of different objects. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Confirm which item is the largest/smallest. ✓ Confirm which item is the longest/shortest. ✓ Confirm which item is the widest/narrowest.		

8 Describe and make comparisons in words between measures of items including weight and capacity

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 8. Describe and make comparisons in words between measures of items including weight and capacity	• Describe and compare marked differences in weights of two items using simple comparative vocabulary such as heavy, light • Describe and compare marked differences in capacity and quantity of two items using simple comparative vocabulary such as full, empty, holds more, holds less, has more, has less	The learner should be able to: • describe weight • use direct comparisons for weight • understand and use vocabulary related to weight • understand that weight is not related to size • describe capacity • use direct comparisons for capacity • understand and use vocabulary related to capacity • understand that capacity is a measure of volume • understand that shapes of containers can be deceptive.	• Compare the weight of two objects to decide which is heavier, lighter. • Compare objects of the same size but different weights. Order them by weight. • Identify containers of different shapes which hold the same amount. • Identify common containers for liquids and solids, e.g. bottles, cans, tins, jars, cartons, boxes. • Compare different common containers for liquids and solids, e.g. bottles, cans, tins, jars, cartons, boxes.
Key Words	weight, capacity, heavy, heavier, heaviest, light, lightest, full, empty, holds more than, holds less than		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Select the lighter of two given items. ✓ Select the heaviest item from a selection of items. ✓ Choose a suitable container to fill with water. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Compare the weight of two different sizes of the same product to decide which is heavier. ✓ Compare the weight of two different sizes of the same product to decide which is lighter. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Decide which item is the heaviest/lightest. ✓ Decide which container holds more than/less than.		

9 Identify and recognise common 2-D and 3-D shapes, including circle, cube, rectangle (including square) and triangle

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 9. Identify and recognise common 2-D and 3-D shapes, including circle, cube, rectangle (including square) and triangle	• Recognise some common 2-D shapes (circle, square, rectangle, triangle) using familiar and simple vocabulary to describe their shape and size, such as straight, curved, flat, larger, smaller • Recognise some common 3-D shapes (ball, box) using familiar and simple vocabulary to describe their shape and size such as straight, curved, flat, larger, smaller • Identify and select a variety of shapes to make simple pictures, patterns and models	The learner should be able to: • recognise common 2-D shapes • know the names of common 2-D shapes • recognise common 3-D shapes • know the names of common 3-D shapes • understand the difference between 2-D and 3-D shapes.	• Select a circle, rectangle, square and triangle from a range of 2-D shapes. • Classify objects by shape. • Select a cube from a collection of objects. • Draw common shapes. • Find shapes in everyday objects, e.g. photographs, pictures, clothes.
Key Words	circle, cube, rectangle, square, triangle, faces, sides, equal, 3-D, 2-D, straight, curved, flat		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Identify shapes in a curtain or wallpaper design. ✓ Identify a cube from a collection of objects. ✓ Select a mirror of a given shape from a selection of mirror shapes. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Draw the shape of a given object, e.g. a rectangular place mat. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Confirm the number of sides of the rectangular place mat.		

10 Use everyday positional vocabulary to describe position and direction, including left, right, in front, behind, under and above

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 10. Use everyday positional vocabulary to describe position and direction, including left, right, in front, behind, under and above	• Understand and apply simple positional vocabulary, including in/out, under/over, front/back, in front of/behind • Understand and apply direction of movement, including up/down, left/right	The learner should be able to: • understand everyday positional vocabulary.	• Follow spoken instructions or directions using positional vocabulary. • Follow written instructions or directions using positional vocabulary.
Key Words	left, right, in front, behind, under, over, above		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain directions to the shop using positional vocabulary. ✓ Obtain instructions about where to find an item of equipment in a cupboard using positional vocabulary. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Follow directions to the shop using positional vocabulary. ✓ Follow instructions about where to find an item of equipment in a cupboard using positional vocabulary. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. Make a decision regarding the position of the shop. ✓ Make a decision regarding the position of the item of equipment in the cupboard.		

Handling information and data

11 Read numerical information from lists

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Handling information and data 11. Read numerical information from lists	• Recognise and describe lists of up to five items that are ordered either numerically or alphabetically, by pattern of sequence	The learner should be able to: • obtain simple information from lists • understand that lists can be ordered in different ways, e.g. numerically, alphabetically • understand that not all lists are ordered logically • understand that a list can contain words, numbers or both.	• Obtain a variety of information from a range of simple lists, e.g. contact details, quantities, fixtures.
Key Words	list, numerical, alphabetical		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find a telephone number from a short contact list. ✓ Read information from a short price list. ✓ Find ingredients required for a recipe/meal. ✓ Choose items on a menu. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Highlight the telephone number from a short contact list, for a stated contact. ✓ Find the cost of a chosen item. ✓ Produce a shopping list for a recipe/meal. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Decide whether the chosen item on a list is less than another item on the list. ✓ Decide how many items are required for the recipe/meal.		

12 Sort and classify objects using a single criterion

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Handling information and data 12. Sort and classify objects using a single criterion	• Sort up to ten objects by a single criterion including shape, size, weight, quantity, colour, function	The learner should be able to: • understand the concept of a criterion, e.g. a single feature such as colour, shape, gender, height.	• Know the different criteria used to classify different objects. • Sort objects according to type. • Classify a range of objects by a given criterion.
Key Words	criteria, sort, group		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Identify different bottles by colour for recycling. ✓ Identify different types of clothing. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Sort and group a variety of items. ✓ Sort and group different coloured bottles for recycling. ✓ Sort and group a variety of items for a jumble sale (dresses, coats, jumpers). Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Decide which is the smallest/largest group. ✓ Confirm the number of an item within a group.		

13 Read and draw simple charts and diagrams, including a tally chart, block diagram/graph

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Handling information and data 13. Read and draw simple charts and diagrams, including a tally chart, block diagram/graph	• Use simple representations or diagrams for counting numbers up to 20 including a number line • Work out given problems using numbers up to 20	The learner should be able to: • understand that the purpose of charts and diagrams is to communicate information • understand that information can be represented in different ways • understand that a title, label and key provide information • know what is meant by a tally • make observations and record numerical information using a tally • know that tally marks have to be counted • understand that the height of the bar indicates the numerical value in that category • understand that values are compared through the height of the bars • use a scale to extract and represent information.	• Collect suitable data by observation. • Record data correctly. • Display given data correctly using a tally chart. • Display given data correctly in a suitable block diagram. • Display given data correctly in a suitable graph. • Sketch a simple room plan showing the location of main features.
Key Words	tally chart, block diagram, graph, title, label, key, scale		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain numerical information from given simple charts. ✓ Obtain the highest daily hours of sunshine, rainfall and temperature from a weather chart. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. E.g. ✓ Carry out a survey and present results using a tally chart to show the preferred day of the week for meetings, or favourite holidays.		

	✓ Draw a block diagram to show the number of ice creams sold by a newsagent in a week, or how people in the office get to work. ✓ Draw a block diagram/graph of the highest daily temperatures in a week. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners may be expected to make a yes/no decision. E.g. ✓ Make a decision relating to the results of a tally chart, e.g. how many people said Wednesday was their preferred day for meetings, or a cruise was their favourite type of holiday. ✓ Make a decision relating to a simple block diagram, e.g. the day on which the most ice creams were sold, how many people travel to work by bus, or how many days the temperature was below 10°C.

Entry Level 2 LTP –

Using numbers and the number system – whole numbers, fractions and decimals

1. Count reliably up to 100 items
2. Read, write, order and compare numbers up to 200
3. Recognise and sequence odd and even numbers up to 100

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 1. Count reliably up to 100 items 2. Read, write, order and compare numbers up to 200 3. Recognise and sequence odd and even numbers up to 100	• Use whole numbers to count up to 20 items, including zero • Read, write, order and compare numbers up to 20	The learner should be able to: • count reliably up to 100 items • understand that if items are rearranged the number stays the same • know how to count on and back from any number below 100 • count in twos and tens up to 100 • count on in tens up to 100, starting from any two-digit number • recognise the numerals 0–200 • read numbers up to 200, including zero • write numbers up to 200, including zero • recognise numbers written in different fonts and styles • order and compare numbers up to 200, including zero • understand that the position of a digit signifies its value • know what each digit in a two-digit number represents, including the use of a zero as a placeholder	• Count items, re-arrange them and count them again. • Count on from 0 starting with a different number, up to 200. • Match numbers in figures to numbers in words. • Read numbers in everyday documents and contexts, e.g. signs, notices, adverts, posters. • Fill in missing numbers in a sequence and on a number line (whole, odd and even numbers). • Rearrange numbers in order. • Complete number lines counting in twos and tens.

		• know what each digit in a three-digit number represents, including the use of a zero as a placeholder • recognise odd and even numbers up to 100 • understand the relative position in a sequence of numbers, e.g. first, second, third.	
Key Words	digit, units, tens, hundreds, order, difference, compare, most, least, fewest, greatest, smallest, odd, even, sequence		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find the smallest number in a context list of numbers below 200. ✓ Find the greatest number in a context list of number below 200. ✓ Find an address by reading door numbers. ✓ Recognise when house numbers go up in odd or even numbers. ✓ Read speed limits on traffic signs. ✓ Use page numbers to locate information. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Count the items in a delivery. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Order the number of each item in the delivery. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Compare the number of two stated items in the delivery.		

4 Recognise and interpret the symbols +, − and = appropriately
5 Add and subtract two-digit numbers
9 Approximate by rounding to the nearest 10, and use this rounded answer to check results

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 4. Recognise and interpret the symbols +, − and = appropriately 5. Add and subtract two-digit numbers 9. Approximate by rounding to the nearest 10, and use this rounded answer to check results	• Add numbers which total up to 20, and subtract numbers from numbers up to 20 • Recognise and interpret the symbols +, − and = appropriately	The Learner should be able to: • recognise the numerals 0–99 • add and subtract single and two-digit whole numbers • understand that there are different strategies to help with mental addition and subtraction • understand that subtraction is the inverse of addition • know how to align numbers for column addition and subtraction • understand the operations of addition and subtraction and related vocabulary • understand a whole number can only be subtracted from itself or from a larger one • understand that subtracting zero leaves a number unchanged • knows the symbols +, − and = • understand that + represents the operation of addition • understand that − represents the operation of subtraction • understand that = represents equality and related vocabulary • understand that numbers can be rounded to different degrees of accuracy, e.g. nearest 10	• Be aware of different words used for addition and subtraction. • Use different strategies for mental addition and subtraction. • Use different strategies for adding numbers, e.g. breaking down and recombining, looking for pairs which make 10, starting with the largest number and counting on in tens or ones, identifying near doubles. • Match cards with subtraction facts to related addition calculations, e.g. 12 − 9 = 3, 3 + 9 = 12. • Break numbers down and use the knowledge of pairs which total 10 to learn pairs with totals to 20, e.g. 13 + 7 = 10 + 3 + 7 =20. • Apply strategies to solving problems with whole numbers. • Round numbers to the nearest 10 to make approximate calculations.

		• understand place value for units and tens.	
Key Words	digit, units, tens, add, plus, sum of, total, equals, is equal to, is the same as, difference, take away, subtract, less than, approximate, rounding, rounded, place value		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the total number of items (94 packs of cards) and the number to be added to or subtracted from the total (37 packs of cards are sold). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Identify the correct process (94 − 37 = total number of packs remaining). Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Find the answer to the addition/subtraction calculation and check it (94 − 37 = 57; Check – Round numbers to the nearest 10 to make approximate calculations: 90 − 40 = 50). Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the answer within the context of the question. (There are 40 packs of cards left.)		

4 Recognise and interpret the symbols × and = appropriately
6 Multiply whole numbers in the range 0 × 0 to 12 × 12 (times tables)
9 Approximate by rounding to the nearest 10, and use this rounded answer to check results

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 4. Recognise and interpret the symbols × and = appropriately 6. Multiply whole numbers in the range 0 × 0 to 12 × 12 (times tables) 9. Approximate by rounding to the nearest 10, and use this rounded answer to check results	• Add numbers which total up to 20, and subtract numbers from numbers up to 20 • Recognise and interpret the symbols +, − and = appropriately	The Learner should be able to: • multiply using single and two-digit whole numbers • understand and use the vocabulary of multiplication • understand the operation of multiplication as repeated addition, e.g. 4 × 7 = 7 + 7 + 7 + 7 • understand there are different strategies for multiplying • know times tables in the range 0 × 0 to 12 × 12 • understand multiplication is commutative (e.g. 2 × 3 = 3 × 2) although the functional meaning is different (e.g. taking 2 tablets three times a day is different to taking 3 tablets twice a day) • understand the relationship between halving and doubling • know doubles of numbers • understand × represents the operation of multiplication • understand = represents equality and related vocabulary • understand numbers can be rounded to different degrees of accuracy, e.g. nearest 10	• Use multiplication vocabulary. • Write repeated addition sums as multiplication and vice versa. • Use different strategies for multiplying and mental multiplication. • Extend sequences using different multiples in the range 0 × 0 to 12 × 12. • Identify patterns for multiples and establish the 'rules'. • Match pairs of numbers which are halves/doubles. • Round numbers to the nearest 10 to make approximate calculations.

		• understand place value for units and tens.	
Key Words	digit, units, tens, multiple, multiplied by, times, lots of, doubles, approximate, rounding, rounded, place value		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find the number of items in two groups that require multiplying (number of boxes and number of bottles in each box). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Calculate the total number of items in batches (4 boxes with 12 bottles in each box). Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Find the correct total and check their working by reverse calculation. ✓ (4 x 12 = 48 Check: 48 ÷ 12 = 4) Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm if there is a sufficient number of required bottles.		

4 Recognise and interpret the symbols ÷ and = appropriately
8 Divide two-digit whole numbers by single-digit whole numbers and express remainders
9 Approximate by rounding to the nearest 10, and use this rounded answer to check results

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 4. Recognise and interpret the symbols ÷ and = appropriately 8. Divide two-digit whole numbers by single-digit whole numbers and express remainders 9. 9 Approximate by rounding to the nearest 10, and use this rounded answer to check results	• Add numbers which total up to 20, and subtract numbers from numbers up to 20 • Recognise and interpret the symbols +, − and = appropriately	The Learner should be able to: • understand division is repeated subtraction • understand and use the vocabulary of division • understand there are different strategies for division • understand division is the inverse of multiplication • understand that division is not commutative, e.g. 6 ÷ 3 is not the same as 3 ÷ 6 • know and use halving as the inverse of doubling • understand the concept of a remainder, and understand that remainders need to be interpreted in a functional context • understand ÷ represents the operation of division • understand = represents equality and related vocabulary • understand numbers can be rounded to different degrees of accuracy, e.g. nearest 10 • understand place value for units and tens.	• Use division vocabulary. • Write repeated subtraction sums as division and vice versa. • Use different strategies for division and mental division. • Match pairs of numbers which are halves/doubles. • Round numbers to the nearest 10 to make approximate calculations. • Interpret remainders in a functional context correctly.
Key Words	digit, units, tens, division, divided by, share, group, approximate, rounding, rounded, place value		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g.		

	✓ Identify the total number (75 biscuits required) and the number by which the total needs to be divided (4 biscuits per pack). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ I75 ÷ 4 = number of packs required. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ I75 ÷ 4 = 18.75 packs required; Check – 18.75 × 4 =75. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the answer within the context of the question. (The number of packs required needs to be a whole number, so 19 packs are required.)

10 Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 10. Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes	• Use whole numbers to count up to 20 items including zero • Read, write, order and compare numbers up to 20 • Add numbers which total up to 20, and subtract numbers from numbers up to 20 • Recognise and interpret the symbols +, − and = appropriately •	The Learner should be able to: • know the words half, quarter, tenth and the symbols ½, ¼, 1/10 • understand two halves make one whole • understand four quarters make one whole • understand that the bottom number (denominator) indicates the number of equal parts in the whole • understand that a unit fraction is one part of a whole divided into equal parts • understand that a non-unit fraction is several equal parts of a whole, indicated by the top number (numerator) • understand the connection between half of and share (or divide) into two equal parts • understand the connection between quarter of and share (or divide) into four equal parts • understand the connection between tenth of and share (or divide) into ten equal parts.	• Match shaded fractions of shapes to fractions. • Match fractions to words and symbols. • Read fractions used in everyday material, e.g. newspapers, adverts, catalogues. • Understand fractions used in sale signs and special offers. • Estimate equal portions of food to share. • Give examples of use of halves and quarters, e.g. sports (half time), measures (half pint, quarter of a pizza), time (half an hour, quarter of an hour), everyday (half-price sale).
Key Words	halves, quarters, tenths, whole numbers, shapes		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the total number of items (30 answers in total in a test) and the fraction required (half the questions must be correct to pass the test). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem.		

	Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ 30 ÷ 2 = total number of correct answers required to pass the test. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ 30 ÷ 2 = 15 Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the answer within the context of the question. (Learner scored 17 marks; ✓ 17 is greater than 15, so the learner has passed the test.)

11 Read, write and use decimals to one decimal place

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 11. Read, write and use decimals to one decimal place	• Use whole numbers to count up to 20 items including zero • Read, write, order and compare numbers up to 20 • Add numbers which total up to 20, and subtract numbers from numbers up to 20 • Recognise and interpret the symbols +, − and = appropriately	The Learner should be able to: • understand that the decimal point separates the whole and parts of a number • understand the use of zero as a placeholder • understand the use of a leading zero, e.g. 0.5 m = 50 cm • use a calculator to solve problems in context and check calculations using whole numbers and decimals to 1dp.	• Use a metre rule to show how decimal parts of metres (1 dp) are written. • Use a zero as a placeholder. • Use a leading zero. • Know how to key in and interpret the displayed digits on a calculator. • Know and use strategies to check answers obtained with a calculator.
Key Words	digit, units, tens, hundred, order, difference, compare, most, least, fewest, greatest, smallest, odd, even		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find the person who weighs the most given the weights of three persons (65.4 kg, 52.5 kg, 65.9 kg). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Select the numbers with the highest whole number (65.4 and 65.9). Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Select the higher number after the decimal place (65.9). Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the answer within the context of the question. (State the name of the person who weighs 65.9 kg.)		

7 Know the number of hours in a day and weeks in a year; be able to name and sequence

Using common measures, shape and space

13 Read and record time in common date formats and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour digital clock

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 7. Know the number of hours in a day and weeks in a year; be able to name and sequence **Using common measures, shape and space** 13. Read and record time in common date formats and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour digital clock	• Read 12-hour digital and analogue clocks in hours • Know the number of days in a week, months and seasons in a year; be able to name and sequence	The Learner should be able to: • know the relationship between units of time, e.g., 24 hours = 1 day, 7 days = 1 week, 52 weeks = 1 year • know the days of the week and their order • know the months of the year and their order • understand and use common date formats • understand time in the 12-hour and 24-hour clock • know that midnight is 00.00 or 0000 and 12.00 or 1200 is midday • understand and use timetables.	• Use vocabulary, e.g. different times of day, weekday, weekend. • Match the months in words to their abbreviations. • Match dates written in different formats, e.g. 9/8/19, 09/08/19, 9th August 2019, • 9 Aug 19. • Read 'sell by' and 'use by' dates on food labels and medicine labels. • Identify the uses of different time, e.g. seconds (on a microwave, results of sporting events), minutes, hours (journey times, work times). • Match 12- and 24-hour clock times. • Read the time on different analogue clocks using o'clock, half past, quarter to and quarter past. • Read the time on different 24-hour digital clocks using o'clock, fifteen, thirty and forty-five. • Match times in words to different clocks.

			• Use a TV listing to find out the start and finish times of programmes on a given day. • Use bus and train timetables to find different dates, departure and arrival times. • Complete a time sheet/time planner. • Use watches, clocks and calendars to read and record times of different activities.
Key Words	year, month, week, day, hour, date, analogue clock, digital clock, calendar, timetable, o'clock, half past, quarter to, quarter past		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find dates and times from given information, e.g. train timetables, holiday brochures, travel information, cooking times in recipes, party planning. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Record start and finish times from given information. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Complete a time planner for an event using the times recorded. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Answer questions related to the completed time planner, e.g. arrival time, length of journey time, time a dish needs to be put in oven, time food is served at a party.		

12 Calculate money with pence up to one pound and in whole pounds of multiple items and write with the correct symbol (£ or p)

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 13. Calculate money with pence up to one pound and in whole pounds of multiple items and write with the correct symbol (£ or p)	• Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20	The Learner should be able to: • make amounts of money up to £1 in different ways using 1p, 2p, 5p, 10p, 20p, and 50p • calculate the cost of more than one item and the change from a transaction, in pence or in whole pounds • understand the same strategies used with numbers can be applied in practical situations using money • know and use appropriately the symbols for money notation £ and p.	• Exchange coins for equivalent value using a number of smaller coins up to £1. • Find the total of a selection of mixed coins. • Pay for items by 'adding on' coins. • Make up different amounts using a selection of coins. • Count out the exact amount when paying for something, e.g. a chocolate bar. • Pay the correct fare for a bus or train journey. • Calculate the cost of two items and the change from a given amount. • Use a range of mental strategies, e.g. addition, subtraction, multiplication. • Be able to enter sums of money in a calculator. • Round sums of money to the nearest 10p and make approximate calculations. • Write the correct symbol (£ or p).
Key Words	pounds, pence, coin, note		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Select items from a price list (items listed in pence up to £1). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use.		

	Learners will need to use facts and terminology accurately. E.g. ✓ Find the total of two selected items from the price list. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ State the total amount with the correct symbol. ✓ Use rounding (to the nearest 10p) to work out the approximate cost of the items selected. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm if the correct change has been given.

14 Use metric measures of length, including millimetres, centimetres, metres and kilometres
18 Read and use simple scales to the nearest labelled division

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 14. Use metric measures of length, including millimetres, centimetres, metres and kilometres 18. Read and use simple scales to the nearest labelled division	• Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity	The Learner should be able to: • understand and use vocabulary related to measures of length, width and height • know millimetres, centimetres, metres and kilometres are metric units of length and be able to relate the measurements to familiar things • recognise and write millimetres, centimetres, metres and kilometres in full and abbreviated, e.g. mm, cm, m, km • understand mm, cm, m and km divisions on simple scales • understand labelled divisions on different scales • read scales to the nearest labelled division • know how to use a ruler to draw and measure lines to the nearest cm.	• Give the appropriate unit for measuring various items, e.g. nail, book, furniture, door, driveway, distance to London. • Know the equivalents of different units of measurements, e.g. 10 mm = 1 cm, 100 cm = 1 m, 1000 m = 1 km. • Select and use different measuring instruments. • Measure and record lengths of items to the nearest mm, cm or m. • Order lengths of different sizes. • Use a ruler marked in millimetres and labelled in centimetres to draw and measure lines of different lengths.
Key Words	size, length, width, height, large, millimetres, centimetres, metres, kilometres		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ A line needs to be painted halfway along a football pitch. The pitch is 100 m long. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Divide the length by 2 (100 ÷ 2 = where the line needs to be painted).		

	Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Calculate the measurement (100 m ÷ 2 = 50 m). Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the answer within the context of the question. (The line needs to be painted at 50 m).

15 Use measures of weight, including grams and kilograms
16 Use measures of capacity, including millilitres and litres
18 Read and use simple scales to the nearest labelled division

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 15. Use measures of weight, including grams and kilograms 16. Use measures of capacity, including millilitres and litres 18. Read and use simple scales to the nearest labelled division	• Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity	The Learner should be able to: • understand and use vocabulary related to weight • know that a kilogram is a metric unit of weight and relate the measurement to familiar quantities • recognise and write grams and kilograms in full and abbreviated to g, kilo and kg • understand g and kg divisions on a simple scale • understand labelled divisions on different scales • read scales to the nearest labelled division • know how to use scales and measure grams and kilograms • understand and use vocabulary related to capacity • understand ml and l divisions on a simple scale • understand labelled divisions on different scales • read scales to the nearest labelled division • know how to use a measuring jug and measure millilitres and litres.	• Read the weight on different packaging. • Know the equivalents of different units of measurement, e.g. 100 g = 1 kg. • Select and use different weighing instruments. • Measure and record the weight of items to the nearest g or kg. • Order weights of different sizes. • Read the capacity on different containers of liquid. • Know the equivalents of different units of measurement, e.g. 1000 ml = 1 l. • Select and use different instruments for measuring liquids. • Measure and record the capacity of liquids to the nearest ml or l. • Order different sizes of liquid quantities.
Key Words	weight, capacity, grams and kilograms, millilitres and litres		

Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Identify the quantities of ingredients for a recipe and select the appropriate measuring instrument(s). ✓ Identify the capacity of three bottles of shampoo and compare with the 100 ml maximum capacity allowed on a flight (85 ml, 125 ml, 50 ml). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Measure accurately dry and liquid ingredients for a recipe, using labelled divisions on a scale. ✓ Select the bottles with capacity less than 100 ml (50 ml, 85 ml). Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Select the correct labelled divisions. ✓ Select the bottle with the capacity nearest to 100 ml. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm if the weight/capacity of one ingredient is heavier/lighter or more/less than that of another ingredient. ✓ State the biggest bottle allowed on a flight (85 ml).

17 Read and compare positive temperatures
18 Read and use simple scales to the nearest labelled division

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 17. Read and compare positive temperatures 18. Read and use simple scales to the nearest labelled division	• Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity	The Learner should be able to: • understand and use vocabulary related to temperature in degrees Celsius • know units of temperature • recognise and write degrees Celsius and the abbreviation °C • compare positive temperatures in different contexts • understand labelled divisions on different scales • read scales to the nearest labelled division • know how to use a thermometer to measure to the nearest °C.	• Select and use different thermometers for different purposes, e.g. body temperature, weather, cooking. • Read scales on different thermometers. • Find and compare temperatures in different cities around the world.
Key Words	thermometer, scales, Celsius		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Use a newspaper or online website to find today's temperatures in different, stated cities around the word. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Find and record today's temperatures in different cities around the word. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Produce an ordered list of the cities' temperatures. Learners are required to show working in order to gain marks. This working rationalises the answer they present.		

	Learners are expected to interpret their results and provide a decision. E.g. ✓ Identify the city with the hottest temperature and the city with the coldest temperature.

19 Recognise and name 2-D and 3-D shapes, including pentagons, hexagons, cylinders, cuboids, pyramids and spheres
20 Describe the properties of common 2-D and 3-D shapes, including numbers of sides, corners, edges, faces, angles and base

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 19. Recognise and name 2-D and 3-D shapes, including pentagons, hexagons, cylinders, cuboids, pyramids and spheres 20. Describe the properties of common 2-D and 3-D shapes, including numbers of sides, corners, edges, faces, angles and base	• Identify and recognise common 2-D and 3-D shapes, including circle, cube, rectangle (including square) and triangle	The Learner should be able to: • understand the use of vocabulary related to shape, e.g. side length, angle • recognise common 2-D shapes, e.g. pentagons, hexagons, cylinders, cuboids, pyramids and spheres • know the names of common 2-D shapes, e.g. pentagons, hexagons • know the names of common 3-D shapes, e.g. cylinders, cuboids, pyramids, spheres • understand that shape is independent of size and orientation • know the properties of common 2-D shapes, such as number of sides and corners • know the properties of common 3-D shapes, such as shape of faces, number of faces, edges and corners • identify angles in 2-D shapes, e.g. how many angles, which shape has the greatest number of angles • know angles are measured in degrees	• Complete a table of common 2-D shapes, giving the number of sides and the number of corners. • Complete a table of common 3-D shapes, giving the number of faces, edges and corners. • Describe the faces of common 3-D shapes. • Identify angles on everyday items, e.g. table, door. • Sort 2-D shapes according to the number of sides, number of angles, number of equal sides and number of equal angles.
Key Words	2-D, 3-D, faces, pentagons, hexagons, cylinders, cuboids, pyramids, spheres, sides, corners, edges, faces, angles, base, equal		

Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain information regarding a 2-D shape. (Draw a patio on a garden plan. The patio must be bigger than the shed on the plan and it must be rectangular.) Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Work out the size and shape the patio needs to be. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Draw the required shape and size on the garden plan (a rectangle which is bigger than the shed shown). Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Draw the rectangle and label it neatly.

21 Use appropriate positional vocabulary to describe position and direction, including between, inside, outside, middle, below, on top, forwards and backwards

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 21. Use appropriate positional vocabulary to describe position and direction, including between, inside, outside, middle, below, on top, forwards and backwards	• left, right, in front, behind, under, above, between, inside, outside, near to, middle, below, on top, forwards and backwards	The Learner should be able to: • understand everyday positional vocabulary to describe position and direction.	• Describe position using positional vocabulary. • Provide directions using positional vocabulary. • Follow spoken instructions or directions using positional vocabulary. • Follow written instructions or directions using positional vocabulary.
Key Words	2-D, 3-D, faces, pentagons, hexagons, cylinders, cuboids, pyramids, spheres, sides, corners, edges, faces, angles, base, equal		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain directions to the shop using positional vocabulary. ✓ Obtain instructions about where to find equipment in a cupboard using positional vocabulary. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Follow directions to the shop using positional vocabulary. ✓ Follows instruction to find an item of equipment in a cupboard using positional vocabulary. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Mark the route to the shop on a simple diagram. ✓ Identify the position of the item on a simple diagram of the cupboard. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g.		

	✓ Make a decision regarding the position of the shop. ✓ Make a decision regarding the position of the item of equipment in the cupboard.

Handling information and data

22 Extract information from lists, tables, diagrams and bar charts

23 Make numerical comparisons from bar charts

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Handling information and data 22. Extract information from lists, tables, diagrams and bar charts 23. Make numerical comparisons from bar charts	• Read numerical information from lists • Read and draw simple charts and diagrams including a tally chart and bar chart	The Learner should be able to: • obtain information from lists • understand that lists can be ordered in different ways (e.g. alphabetically, numerically) and not all lists are ordered in a logical way • understand a list can contain words, numbers or both • understand that tables are arranged in rows and columns • understand that a title, label and key provide information • use a scale to extract numerical values • understand that the height of a bar in a bar chart indicates the numerical value in that category and therefore values are compared based on the height of the bars.	• Obtain a variety of information from a range of simple lists, e.g. contact details, quantities, fixtures. • Obtain information from tables in price lists, catalogues, brochures and websites. • Obtain information from simple diagrams, e.g. floor plans, dimensions. • Obtain information from straightforward charts in newspapers, magazines etc. • Use key elements in a diagram and bar chart to obtain information. • Obtain numerical information from given charts. • Make numerical comparisons, using scales on bar charts.
Key Words	lists, tables, diagrams, bar charts, title, label, key, scale, row, column, list, numerical, alphabetical		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Extract numerical information from given simple charts (preferred meeting time, favourite type of holiday, average daily hours of sunshine, rainfall, temperature). ✓ Extract numerical information from simple bar charts (the day on which the most ice creams were sold, how many people travel to work by bus). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem.		

	Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Make a numerical comparison based on the information in the chart. ✓ Make a numerical comparison based on the information in the bar chart. Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question. E.g. ✓ Identify facts from the chart or diagram. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Make a decision relating to the results of a chart (identify preferred day for meetings, identify the most popular type of holiday). ✓ Make a decision relating to a simple bar chart (identify the day on which the most ice creams were sold, identify how many people travel to work by bus).

24 Sort and classify objects using two criteria
25 Take information from one format and represent the information in another format, including use of bar charts

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Handling information and data 24. Sort and classify objects using two criteria 25. Take information from one format and represent the information in another format, including use of bar charts	• Sort and classify objects using a single criterion • Read and draw simple charts and diagrams, including tally charts, bar charts	The Learner should be able to: • understand the concept of a criterion, e.g. a feature such as colour, shape, gender, height • know how to present data in tables, charts and diagrams • know how to use a simple scale to represent data, e.g. 1 cm = 1 m • understand the different elements in tables, charts and diagrams, e.g. title, axis, scale, key • label tables, charts and diagrams.	• Know the different criteria used to classify different objects. • Choose categories for collection of different types of data. • Sort objects using two criteria. • Classify a range of objects based on a given criterion. • Represent results of a survey. • Translate data in a tally chart into a frequency table. • Produce a timetable or plan. • Produce a simple room plan showing the location of main features. • Display collected data relevant to work, training or leisure interests in a suitable format.
Key Words	lists, tables, diagrams, bar charts, title, label, key, scale, row, column, list, numerical, alphabetical		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Sort clothes for a jumble sale by two criteria, e.g. by size and type. ✓ Obtain information from a tally chart or table, e.g. number of cakes sold in a bakery each day. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Record the number of items of clothing of each type and size for the jumble sale. ✓ Choose how to present the data relating to the number of cakes sold (chart, diagram). Learners are required to obtain and present results and check their own working using a given alternative method. Learners are required to present results within the parameters specified in the question.		

	E.g. ✓ Draw a bar chart to show the number of items of clothing of each type and size. ✓ Draw a bar chart to show the number of cakes sold in the bakery each day. Learners are required to show working in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ What type and size of clothing is least in number? ✓ On what day were the most cakes sold?

Entry Level 3 LTP –

Using numbers and the number system – whole numbers, fractions and decimals

1 Count, read, write, order and compare numbers up to 1000

6 Recognise and continue linear sequences of numbers up to 100

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 1. Count, read, write, order and compare numbers up to 1000 6. Recognise and continue linear sequences of numbers up to 100	• Count reliably up to 100 items • Read, write, order and compare numbers up to 200 • Recognise and sequence odd and even numbers up to 100	The learner should be able to: • count reliably up to 1000 items • understand that the position of a digit signifies its value • know what each digit in a three-digit number represents, including the use of a zero as a placeholder • know how to count on and back starting from any two-digit or three-digit number up to 1000 • recognise the numerals 0–1000 • recognise odd and even numbers • read numbers up to 1000, including zero • write numbers up to 1000, including zero • order and compare numbers up to 1000, including zero • recognise numbers written in different fonts and styles.	• Write three-digit numbers as sums of hundreds, tens and units, e.g. 547 = 500 + 40 + 7. • Match numbers in figures to numbers in words. • Given a number in words, write it in digits. • Extend number sequences. • Order jumbled number sequences. • Read numbers in everyday documents and contexts, e.g. signs, notices, adverts, posters. • Fill in missing numbers in a sequence and on a number line (whole, odd and even numbers).
Key Words	digit, units, tens, hundreds, thousands, order, difference, compare, most, least, fewest, greatest, smallest, odd, even		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the amount of money in four people's bank accounts (£375, £352, £373, £357). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use.		

	Learners will need to use facts and terminology accurately. E.g. ✓ Order the four amounts of money. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Identify the person with the most/least money in their account. Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Name the person who has the most/least money in their account.

2 Add and subtract using three-digit whole numbers

5 Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 1. Add and subtract using three-digit whole numbers 5. Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results	• Recognise and interpret +, −, ×, ÷ and = appropriately • Add and subtract 2-digit numbers • Approximate by rounding to the nearest 10, and use rounded answer to check results	The learner should be able to: • understand that there are different strategies for adding and subtracting • add and subtract three-digit whole numbers • know how to align numbers in column addition and subtraction • understand place value for units, tens, hundreds and thousands • understand that subtraction is the inverse of addition • understand that numbers can be rounded to different degrees of accuracy, e.g. nearest 10, nearest 100 • understand that there are different methods of checking results, e.g. using inverse, using a calculator, approximation by rounding, adding in a different order.	• Be aware of different words used for addition and subtraction. • Use different strategies for mental addition and subtraction. • Use different strategies for checking results. • Apply different strategies to add numbers, e.g. breaking down and recombining, looking for pairs which make 10, starting with the largest number and counting on in tens or ones, identifying near doubles. • Apply mental strategies and written methods to solve problems with whole numbers. • Round numbers to the nearest 10 or 100 to make approximate calculations. • Use and interpret +, − and = in practical situations to solve problems.
Key Words	digit, units, tens, add, plus, sum of, total, equals, is equal to, is the same as, difference, take away, subtract, less than		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the amount of money in a person's bank account (£500) and the amount of a bill that needs to be paid (£346). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately.		

	E.g. ✓ Select the amount to be paid and subtract this from the total amount in the bank account (500 − 346 = ?). Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Obtain the amount remaining in the bank account (500 − 346 = 154; Check: 500 − 350 = 150). Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the amount remaining in the bank account. (State £154 remaining in bank account.)

4 Multiply two-digit whole numbers by single- and double-digit whole numbers
5 Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 4. Multiply two-digit whole numbers by single- and double-digit whole numbers 5. Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results	• Recognise and interpret +, −, ×, ÷ and = appropriately • Multiply whole numbers in the range 0 × 0 to 12 × 12 (times tables) • Approximate by rounding to the nearest 10, and use rounded answer to check results	The learner should be able to: • multiply two-digit whole numbers by single-digit whole numbers • multiply two-digit whole numbers by double-digit whole numbers • understand place value for units, tens and hundreds • understand that there are different strategies for multiplying • understand and use the vocabulary of multiplication • understand that multiplication is repeated addition • understand that multiplication is commutative, e.g. 12 × 6 = 6 × 12 • understand that numbers less than 1000 can be rounded to different degrees of accuracy, e.g. nearest 10 or nearest 100.	• Write repeated addition sums as multiplication and vice versa. • Use different strategies for multiplying and mental multiplication. • Use multiplication vocabulary. • Extend sequences using different multiples. • Identify patterns for multiples and establish the 'rules'. • Round numbers to the nearest 10 and 100 to make approximate calculations. • Change whole pounds to pence. • Change whole metres to centimetres. • Change centimetres to millimetres. • Use and interpret × and = in practical situations to solve problems.
Key Words	digit, units, tens, multiple, multiplied by, times, lots of, doubles		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the number of boxes of rulers a school buys (36). Find the number of rulers in a box (24). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Calculate the total number of rulers (36 × 24 =?).		

	Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Find the total number of rulers (36 × 24 = 864; Check: 40 × 20 = 800). Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the school has enough rulers for 800 pupils. (Yes, the school has 864 rulers.)

3 Divide three-digit whole numbers by single- and double-digit whole numbers and express remainders
5 Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 3. Divide three-digit whole numbers by single- and double-digit whole numbers and express remainders 5. Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results	• Recognise and interpret +, −, ×, ÷ and = appropriately • Divide two-digit whole numbers by single-digit whole numbers and express remainders • Approximate by rounding to the nearest 10, and use rounded answer to check results	The learner should be able to: • divide three-digit whole number by single-digit numbers and express remainders • divide three-digit whole numbers by double-digit whole numbers and express remainders • understand and use the vocabulary of division • understand that there are different strategies for division • understand that division is repeated subtraction • understand that division is the inverse of multiplication • understand that division is not commutative, e.g. 6 ÷ 3 is not the same as 3 ÷ 6 • understand the concept of a remainder, and understand that remainders need to be interpreted in a functional context • understand that numbers can be rounded to different degrees of accuracy, e.g. nearest 10, nearest 100 • understand place value for units, tens and hundreds.	• Use division vocabulary. • Write repeated subtraction sums as division and vice versa. • Use different strategies for division and mental division. • Round numbers to the nearest 10 and nearest 100 to make approximate calculations. • Interpret remainders in the context of problems. • Use and interpret ÷ and = in practical situations to solve problems.
Key Words	digit, units, tens, division, divided by, share, group, split, halve		

Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the number of roses a florist buys (200 roses). Identify the number of roses needed for each bunch (12). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Calculate the number of bunches that can be made (200 ÷ 12 = ?). Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Find the number of bunches that can be made (200 ÷ 12 = 16 with 8 remaining; Check: 16 × 12 = 92). Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the number of bunches and the number of roses remaining (16 bunches can be made with 8 roses remaining).

7 Read, write and understand thirds, quarters, fifths and tenths, including equivalent forms

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 7. Read, write and understand thirds, quarters, fifths and tenths, including equivalent forms	• Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes	The learner should be able to: • know the words thirds, quarters, fifths and tenths and the symbols 1/3, 1/4, 1/5, 1/10 • understand that the bottom number (denominator) indicates the number of equal parts in the whole • understand that a unit fraction is one part of a whole divided into equal parts • understand that a non-unit fraction is several equal parts of a whole, indicated by the top number (numerator) • understand that in unit fractions, the larger the denominator the smaller the fraction; understand that this is not true with non-unit fractions • understand the connection between third of and share (or divide) into three equal parts • understand the connection between quarter of and share (or divide) into four equal parts • understand the connection between fifth of and share (or divide) into five equal parts • understand the connection between tenth of and share (or divide) into ten equal parts	• Match shaded fractions of shapes to fractions. • Match fractions to words and symbols. • Read fractions used in everyday material, e.g. newspapers, adverts, catalogues. • Understand fractions used in sale signs and special offers. • Estimate equal portions of food to share. • Give examples of the use of fractions, e.g. measures (one third of a pizza, a fifth of the class are females), time (quarter of an hour), everyday (quarter turn on a tap).

		• know common equivalent fractions, e.g. equivalent to quarters, thirds, fifths, tenths • understand that equivalent fractions look different but have the same value • understand that when the top and bottom number of a fraction are the same, this is equivalent to 1.	
Key Words	thirds, quarters, fifths, tenths, whole numbers, shapes		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find the number of rooms in a hotel (84 rooms) and identify the fraction of rooms not booked (1/3). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Calculate the number of rooms not booked (84 ÷ 3 =?). Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Find the number of rooms not booked (84 ÷ 3 = 28). Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the number of rooms not booked. (28 rooms are not booked.)		

8 Read, write and use decimals up to two decimal places
9 Recognise and continue sequences that involve decimals

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using numbers and the number system – whole numbers, fractions and decimals 8. Read, write and use decimals up to two decimal places 9. Recognise and continue sequences that involve decimals	• Read, write and use decimals to one decimal place	The learner should be able to: • understand that the decimal point separates the pounds and pence, or m and cm • understand the use of a zero as a placeholder, e.g. £1.05 is £1 and 5p • understand the use of a leading zero, e.g. 0.5 m = 50 cm • recognise .5 as a half, e.g. 2.5 m = 2½ m • use a calculator to calculate using whole numbers and decimals to 1dp, to solve problems in context, and to check calculations.	• Use a metre rule to show how decimal parts of metres (1dp) are written. • Use a zero as a placeholder. • Use a leading zero. • Read sums of money written in decimal notation, e.g. price tags, price lists, adverts, newspapers. • Write amounts in pence using decimal notation, e.g. £0.45. • Select coins to match decimal notation. • Know how to key in and interpret the displayed digits on a calculator.
Key Words	digit, units, tens, hundreds, order, difference, compare, most, least, fewest, greatest, smallest, odd, even		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the heights of four children (1.23 m, 1.35 m, 1.2 m, 1.02 m). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Put the heights in order of size (1.02 m, 1.2 m, 1.23 m, 1.35 m). Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Select the shortest/tallest height (1.02 m/1.35 m).		

	Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ State the height of the shortest/tallest person. (The shortest child is 1.02 m./The tallest child is 1.35 m.)

Using common measures, shape and space

10 Calculate with money using decimal notation and express money correctly in writing in pounds and pence

11 Round amounts of money to the nearest £1 or 10p

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 10. Calculate with money using decimal notation and express money correctly in writing in pounds and pence 11. Round amounts of money to the nearest £1 or 10p	• Make money calculations for multiple items using pence up to one pound and in whole pounds and write with the correct symbol (£ or p)	The learner should be able to: • add and subtract sums of money using decimal notation • understand that the same strategies used with numbers can be applied in practical situations using money, e.g. shopping, household bills, orders, pay slips, cost of a small job or work, weekly budget • make approximate calculations by rounding sums of money to the nearest £ or 10p.	• Be able to align decimal points and figures in column addition and subtraction. • Be able to enter sums of money in a calculator. • Use a range of written and mental strategies, i.e. addition, subtraction, multiplication and division, to calculate everyday monetary costs. • Round sums of money to the nearest 10p and make approximate calculations. • Recognise when to round up to the nearest £, e.g. £1.99 is approximately £2. • Use approximate calculations to estimate the cost of shopping.
Key Words	pounds, pence, coin, note		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find the cost of an item (£2.98). Find the value of a voucher (45p). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Deduct the value of the voucher from the cost of the item (2.98 − 0.45 =?).		

	Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Find the total amount that needs to be paid (2.98 − 0.45 = 2.53; Check: 3.00 − 0.50 = 2.50). Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ State the total amount of money that needs to be paid in pounds and pence. (£2.53 needs to be paid.)

12 Read, measure and record time using am and pm
13 Read time from analogue and 24-hour digital clocks in hours and minutes

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 12. Read, measure and record time using am and pm 13. Read time from analogue and 24-hour digital clocks in hours and minutes	• Read and record time in common date formats • Read time displayed on analogue clocks in hours, half hours and quarter hours • Understand hours from a 24-hour digital clock • Know the number of hours in a day and weeks in a year; be able to name and sequence	The learner should be able to: • read time in the 12-hour and 24-hour clock • measure time in the 12-hour and 24-hour clock • know the relationship between units of time, e.g. 1 hour = 60 minutes • add and subtract time in hours and minutes • convert units of time, e.g. 70 minutes = 1 hour 10 minutes • record time in the 12-hour and 24-hour clock • understand and use am and pm • know that midnight is 00.00 or 0000 and 12.00 or 1200 is midday • know the units of time, i.e. year, month, week, day, hour, minute.	• Match 12-hour and 24-hour clock times. • Read the time on different analogue clocks using o'clock. • Read the time on different 24-hour digital clocks. • Match times in words to different clocks. • Identify the uses of different time e.g., minutes (sporting events, cooking times, journey times, programmes times), hours (journey times, work times). • Use TV/cinema/theatre listings to find out the start and finish times of programmes/events on a given day. • Calculate the length of a programme/performance. • Use bus/train timetables to find different departure and arrival times. • Calculate a journey time from a timetable. • Complete a work time sheet/time planner. • Use watches and clocks to read and record times of different activities.
Key Words	year, month, week, day, hour, minute, date, analogue clock, digital clock, timetable, o'clock, 12-hour clock, 24-hour clock		

Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the departure and arrival times of a bus journey from a timetable (departs 8:55 am; arrives 11:47 am). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Calculate the journey time. (Select 8:55 and 11:47; show working 5 + 60 + 60 + 47.) Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Indicate the journey time. (5 + 60 + 60 + 47 = 172 minutes or 2 hours 52 minutes; Check: Round 8:55 to 9 o'clock and 11:47 to 12 o'clock = 3 hours.) Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the journey time. (The length of the journey is 2 hours 52 minutes.)

14 Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division

15 Compare metric measures of length, including millimetres, centimetres, metres and kilometres

18 Use a suitable instrument to measure mass and length

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 14. Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division 15. Compare metric measures of length, including millimetres, centimetres, metres and kilometres 18. Use a suitable instrument to measure mass and length	• Use metric measures of length, including millimetres, centimetres, metres and kilometres. • Read and use simple scales to the nearest labelled division.	The learner should be able to: • understand and use vocabulary related to measures of length, width and height • know the standard metric units of length, including abbreviations (km, m, cm, mm) and be able to relate the measurements to familiar things • know the standard imperial units of length, including abbreviations (ins, ft, yards, miles) and be able to relate the measurements to familiar things • understand scales of length to the nearest labelled or unlabelled division • understand mm, cm, m and km divisions on simple scales • obtain measurements of different items using a suitable measuring instrument • compare measurements of length in one metric measurement to another, e.g. mm and cm, cm and m • know how to use a ruler to draw and measure lines.	• Know vocabulary related to measures of length, width and height. • Know that 10 mm = 1 cm, 1000 mm = 1 m, 1000 m = 1 km. • Suggest appropriate units to measure, e.g. a nail, height of a door, tennis court, distance to London. • Know the units used for measuring longer distances, e.g. kilometres, miles. • Understand a distance on a road sign when travelling by bus or car. • Read scales to the nearest labelled or unlabelled division. • Provide distances to nearby places, e.g. towns and cities. Rank them in order. • Know how to use a simple scale to estimate distance on a road map. • Estimate, measure and record lengths in different units, for different items, using different measuring instruments. • Draw and measure lines of different lengths using a marked ruler.

Key Words	size, length, width, height, metric units, imperial units, millimetres, centimetres, metres, kilometres
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Find five measurements of rugs (2.25 m, 2.6 m, 1.2 m, 2.75 m, 2.15 m). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Order the five measurements (1.2 m, 2.15 m, 2.25 m, 2.6 m, 2.75 m). Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Select a rug which is at least 2.1 m long but no longer than 2.2 m (2.15 m). Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the length of the rug chosen. (The length of the rug is 2.15 m).

14 Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division
16 Compare measures of weight, including grams and kilograms
17 Compare measures of capacity, including millilitres and litres
18 Use a suitable instrument to measure mass and length

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 19. Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division 16. Compare measures of weight, including grams and kilograms 17. Compare measures of capacity, including millilitres and litres 18. Use a suitable instrument to measure mass and length	• Use measures of weight, including grams and kilograms • Use measures of capacity, including millilitres and litres • Read and compare positive temperatures • Read and use simple scales to the nearest labelled division	The learner should be able to: • understand and use vocabulary related to weight • know the standard metric units of weight, including abbreviations (kg, g) and be able to relate the measurements to familiar things • know the standard imperial units of length, including abbreviations (lbs, oz) and be able to relate the measurements to familiar things • understand scales of weight to the nearest labelled or unlabelled division • understand g and kg divisions on simple scales • obtain weights of different items using a suitable measuring instrument • compare weights in one metric measurement to another, e.g. g, kg • understand and use vocabulary related to capacity • know the standard metric units of capacity, including abbreviations (ml, cl, l) and be	• Be aware of vocabulary used to measure weight and capacity. • Know that 1000 g = 1 kg and 1000 ml = 1 litre. • Know metric units of weight and capacity. • Know imperial units of weights and capacity. • Know which instrument is appropriate for measuring differing weights and capacities. • Understand that temperature can be measured on different scales, but that Celsius is the standard scale in the UK. • Read scales to the nearest labelled or unlabelled division. • Estimate, measure and record weight, capacity and temperature in different units, for different items/situations, using different measuring instruments. • Be aware that temperature units could be in Celsius or Fahrenheit.

		able to relate the measurements to familiar things • know the standard imperial units of capacity, including abbreviations (fl oz, pt, gal) and be able to relate the measurements to familiar things • understand scales of capacity to the nearest labelled or unlabelled division • obtain capacity of different items using a suitable measuring instrument.	
Key Words	weight, capacity, grams, kilograms, millilitres, litres, thermometer, scales, Celsius		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Identify the units of measurement on a given scale (weighing scales, measuring jug, thermometer). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Read the scale accurately to the nearest labelled or unlabelled division. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Indicate the weight, capacity or temperature. Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the weight, capacity or temperature.		

19 Sort 2-D and 3-D shapes using properties, including lines of symmetry, length, right angles, angles, including in rectangles and triangles

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 19. Sort 2-D and 3-D shapes using properties, including lines of symmetry, length, right angles, angles, including in rectangles and triangles	• Recognise and name 2-D and 3-D shapes, including pentagons, hexagons, cylinders, cuboids, pyramids and spheres • Describe the properties of common 2-D and 3-D shapes, including numbers of sides, corners, edges, faces, angles and base	The learner should be able to: • identify regular 2-D and 3-D shapes • know the properties of regular 2-D shapes • know the properties of regular 3-D shapes • know that angles are measured in degrees • know that a right angle is 90° or a quarter turn • understand the meaning of parallel and recognise parallel lines • identify which regular shapes tessellate, i.e. fit together without a gap • identify the lines of symmetry in shapes and images.	• Sort 2-D shapes using properties, e.g. number of angles/right angles, lines of symmetry, number of equal sides, number of parallel lines. • Sort 3-D shapes using properties, e.g. number of faces, number of corners. • Draw a floor plan to show a room layout. • Plan a tiling pattern using any shape or combination of shapes for a wall or floor. • Stack 3-D shapes of the same size on a shelf, e.g. cans (cylinders), boxes (cuboids). • Sketch the lines of symmetry in shapes and images.
Key Words	2-D, 3-D, faces, rectangle, square, circle, triangle, pentagon, hexagon, cylinder, cube, cuboid, pyramid, sphere, side, corner, edge, face, angle, right angle, base, equal, symmetry, length, degree, parallel, tessellation		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the two shapes required to form a tessellating pattern (hexagon and square). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Plan the tessellation using the two given shapes. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question.		

	E.g. ✓ Draw the tessellating pattern. Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the two shapes can tessellate.

20 Use appropriate positional vocabulary to describe position and direction, including eight compass points and full/half/quarter turns

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Using common measures, shape and space 20. Use appropriate positional vocabulary to describe position and direction, including eight compass points and full/half/quarter turns	• Use appropriate positional vocabulary to describe position and direction, including between, inside, outside, middle, below, on top, forwards and backwards	The learner should be able to: • understand everyday positional vocabulary to describe position and direction.	• Describe position using positional vocabulary, e.g. full/half/quarter turns. • Provide directions using positional vocabulary, e.g. eight compass points. • Follow spoken instructions or directions using positional vocabulary. • Follow written instructions or directions using positional vocabulary.
Key Words	position, direction, compass points, full/half/quarter turns		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Use a given map to provide written instructions to get to a stated destination. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Use positional vocabulary to give directions. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Use positional vocabulary to give directions explaining the route to follow to arrive at the stated destination. Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the direction of travel using one of the eight compass points.		

Handling information and data

21 Extract information from lists, tables, diagrams and charts and create frequency tables

22 Interpret information, to make comparisons and record changes, from different formats, including bar charts and simple line graphs

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Handling information and data 21. Extract information from lists, tables, diagrams and charts and create frequency tables 22. Interpret information, to make comparisons and record changes, from different formats, including bar charts and simple line graphs	• Extract information from lists, tables, diagrams and bar charts • Make numerical comparisons from bar charts	The learner should be able to: • understand that a title, label and key provide information • know how to read the scale on an axis • know how to use a simple scale such as 1 cm to 1 m • know how to obtain information from a pictogram, pie chart, bar chart or single line graph • understand that comparisons can be made based on the height or length of the bars, or the number of pictures.	• Obtain information from tables in price lists, catalogues, brochures and websites. • Obtain numerical information from given charts. • Obtain information from given diagrams or drawings in a practical context, e.g. floor plan. • Use a frequency table to record data in different categories. • Understand diagrams, e.g. floor plans, dimensions with use of the title, labels and key. • Understand information given in charts (e.g. in newspapers, magazines, catalogues, websites, etc.) and obtain key facts. • Understand information given in simple line graphs, such as sales figures, temperature etc. • Understand information given in charts with use of the title, labels and key. • Make numerical comparisons, using scales on bar charts.
Key Words	lists, tables, diagrams, pictograms, bar charts, line graphs, frequency tables, title, label, key, scale, row, column, list, numerical, alphabetical		

Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ From a line graph for changing temperature from degrees Celsius (°C) to degrees Fahrenheit (°F), find 35°C in degrees Fahrenheit (°F). Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Start at 35°C on the vertical axis, move straight across to the line and go directly down to the horizontal axis. Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Indicate the value on the horizontal axis (95°F). Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm 35°C = 95°F.

23 Organise and represent information in appropriate ways, including tables, diagrams, simple line graphs and bar charts

Specification Reference	Prior Knowledge	Objectives	Possible Success Criteria
Handling information and data 23. Organise and represent information in appropriate ways, including tables, diagrams, simple line graphs and bar charts	• Sort and classify objects using two criteria • Take information from one format and represent the information in another format, including use of bar charts	The learner should be able to: • sort, classify and record collected data • know how to present data in tables, diagrams, simple line graphs and bar charts • understand the different elements in tables, charts and diagrams, e.g. title, axis, scale, key • know how to use a simple scale to represent data, e.g. 1 cm = 1 m • label tables, charts, graphs and diagrams.	• Choose suitable categories for collection of different types of data. • Classify data appropriately. • Record collected data in a suitable format. • Translate data in a tally chart into a frequency table. • Produce a timetable or plan. • Produce a simple room plan showing the location of main features. • Display collected data relevant to work, training or leisure interests in a suitable format.
Key Words	sort, represent, group, tally chart, frequency table, title, axis, scale, key, tables, diagrams, line graphs, bar charts		
Examples of opportunities	Learners are required to extract information given in relevant real-world contexts, e.g. ✓ Obtain the number of different trees in a park from a tally chart. Learners are required to select and perform appropriate calculations in order to find the correct answer to a problem. Learners will need to identify and extract key information to decide on the process to use. Learners will need to use facts and terminology accurately. E.g. ✓ Draw a bar chart to show the number of different trees in the park. (Give the chart a suitable title, label the horizontal and vertical axes, and choose an appropriate scale.) Learners are required to obtain and present results and check their own working to an appropriate level of accuracy necessary for the specific task. Learners are required to present results within the parameters specified in the question. E.g. ✓ Draw the required bars for the different types of tree.		

	Learners are required to show working or produce results in order to gain marks. This working rationalises the answer they present. Learners are expected to interpret their results and provide a decision. E.g. ✓ Confirm the number of a specific type of tree or compare the number of two different types of tree,

Delivery Overview

Each week students will be able to use maths in a functional hands-on way. This will be by accessing the community, using money, and time, in their shopping for enterprise, Shop, Cook and Eat sessions. In addition to this each week there will be classroom taught sessions to cover all other aspects of the curriculum and learning the skills and how to answer the specific questions of the functional skills paper.

Below is an overview of the topics to be covered on a weekly basis in the classroom.

Term 1 (15 Weeks)

Week Number	Area	Topic	Entry Level 1	Entry Level 2	Entry Level 3
1	**Baselining**	Baselining – Students to take the assessment at the level that they are working too, to establish areas to focus on through the year, and to see where they are after the summer break.			
2 3 4 5	**Using numbers and the number system**	Number	• Read, write, order and compare numbers up to 20 • Use whole numbers to count up to 20 items including zero • Add numbers which total up to 20, and subtract numbers from numbers up to 20 • Recognise and interpret the symbols +, – and = appropriately	• Count reliably up to 100 items • Read, write, order and compare numbers up to 200 • Recognise and sequence odd and even numbers up to 100 • Recognise and interpret the symbols +, – , x, ÷ and = appropriately • Add and subtract two-digit numbers • Multiply whole numbers in the range 0x0 to 12x12 (times tables)	• Count, read, write, order and compare numbers up to 1000 • Add and subtract using three-digit whole numbers • Divide three-digit whole numbers by single- and double-digit whole numbers and express remainders • Multiply two-digit whole numbers by single- and double-digit whole numbers • Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results • Recognise and continue linear sequences of numbers up to 100

6 7 8 9	**Using common measures, shape and space**	Time	• Read 12 hour digital and analogue clocks in hours • Know the number of days in a week, months, and seasons in a year. Be able to name and sequence	• Know the number of hours in a day and weeks in a year. Be able to name and sequence • Read and record time in common date formats, and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour • digital clock	• Read, measure and record time using am and pm • Read time from analogue and 24 hour digital clocks in hours and minutes
10 11 12 13	**Using numbers and the number system**	Fractions, decimal places	Continue on: • Read, write, order and compare numbers up to 20 • Use whole numbers to count up to 20 items including zero • Add numbers which total up to 20, and subtract numbers from numbers up to 20 • Recognise and interpret the symbols +, – and = appropriately • Introduce ½ and ¼	• Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes • Read, write and use decimals to one decimal place	• Read, write and understand thirds, quarters, fifths and tenths including equivalent forms • Read, write and use decimals up to two decimal places • Recognise and continue sequences that involve decimals
14	Whole Paper	Whole paper assessment to track progress on baseline paper			
15	Whole Paper	Time to spend with students feeding back on the baseline paper and target what they still need to work on from the units covered and intervention plan to be put in place to be followed in form time.			

Term 2 (10 Weeks)

Week Number	Area	Topic	Entry Level 1	Entry Level 2	Entry Level 3
16 17	**Using common measures, shape and space**	Money	• Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20	• Calculate money with pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p)	• Calculate with money using decimal notation and express money correctly in writing in pounds and pence • Round amounts of money to the nearest £1 or 10p
18 19		Measurement – Size, length width and height	• Describe and make comparisons in words between measures of items including **size, length, width, height**	• Use metric measures of length including **millimetres, centimetres, metres and kilometres** • Read and compare positive **temperatures**	• Use and compare measures **of length, capacity, weight** and **temperature** using **metric** or **imperial** units to the nearest labelled or unlabelled division • Compare metric measures of **length including millimetres, centimetres, metres and kilometres**
20 21		Measurement – Weight and capacity	• Describe and make comparisons in words between measures of items including **weight and capacity**	• Use measures of weight including **grams and kilograms** • Use measures of capacity including **millilitres and litres** • Read and use simple scales to the nearest labelled division	• Compare measures of weight including **grams and kilograms** • Compare measures of capacity including **millilitres and litres** • Use a suitable instrument to measure mass and length
22 23	**Handling information and data**		• Read numerical information from lists • Sort and classify objects using a single criterion • Read and draw simple charts and diagrams including a tally chart, block diagram/graph	• Extract information from lists, tables, diagrams and bar charts • Make numerical comparisons from bar charts • Sort and classify objects using two criteria • Take information from one format and represent the	• Extract information from lists, tables, diagrams and charts and create frequency tables • Interpret information, to make comparisons and record changes, from different formats including

				information in another format including use of bar charts	bar charts and simple line graphs • Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts
24	Whole Paper	Whole paper assessment to track progress on baseline paper			

Term 3 (14 Weeks)

Week Number	Area	Topic	Entry Level 1	Entry Level 2	Entry Level 3
25 26	**Using common measures, shape and space**	Shape and Space Geometry	• Identify and recognise common 2-D and 3-D shapes including circle, cube, rectangle (incl. square) and triangle. •	• Recognise and name 2-D and 3-D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres. • Describe the properties of common 2-D and 3-D shapes including numbers of sides, corners, edges, faces, angles and base	• Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles
27 28	**Using common measures, shape and space**	Positional Vocabulary	• Use every day positional vocabulary to describe position and direction including left, right, in front, behind, under and above	• Use appropriate positional vocabulary to describe position and direction, including between, inside, outside, middle, below, on top, forwards and backwards	• Use appropriate positional vocabulary to describe position and direction, including eight compass points and full/half/quarter turns
29 30 31 32	**Consolidation and pre-assessment**	Practice papers	• Use practice papers to prepare for Functional Skills live assessments.		
33 34	**Live Assessment**	Live Assessment	• Live assessments for all Entry levels		
35			•		
36			•		
37			•		
38	Last Week of Academic Year		•		
39	Transition Week		•		

Resources

Resources can be found in the following folder:

O drive Post 16\Curriculum Planning\LTPs\Functional Skills\Maths\Resources

https://passfunctionalskills.co.uk/entry-level-3-maths/

https://www.skillsworkshop.org/category/link-types/learning-resources-external-links/printable-resource-sites/printable-maths-numer

https://global.oup.com/education/secondary/subjects/vocational/functional-skills/maths-free-resources/?region=uk

https://natwest.mymoneysense.com/students/students-5-8/