

Supporting your transition to the 2019 reformed Functional Skills qualifications

Subject Content Mapping - Mathematics

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Entry 1 – Functional Skills Mathematics

Entry 1 Introduction:

New content at this level:

- Read 12 hour digital and analogue clocks in hours (SCS6)

Content that is not new but is now described more explicitly or in greater detail detailed:

- Read, write, order and compare numbers up to 20 (SCS1)
- Use whole numbers to count up to 20 items including zero (SCS2)
- Add numbers which total up to 20, and subtract numbers from numbers up to 20 (SCS3)
- Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20 (SCS5)
- Know the number of days in a week, months and seasons in a year. Be able to name and sequence (SCS7)
- Read and draw simple charts and diagrams including a tally chart, block diagram/graph (SCS13)

The new Subject Content Statements (SCS) are set out below alongside the equivalent criteria (where it exists) from the legacy Functional Skills specification and the Adult Numeracy Core Curriculum. New content or changes are indicated in red.

Content - Number

New Functional Skills Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Read, write, order and compare numbers up to 20 (SCS1)	Understand and use numbers with one significant figure in practical contexts	Read and write numbers up to 10 including zero (N1/E1.2) Order and compare numbers up to 10 , including zero (N1/E1.3)
Use whole numbers to count up to 20 items including zero (SCS2)		Count reliably up to 10 items (N1/E1.1)
Add numbers which total up to 20 , and subtract numbers from numbers up to 20 (SCS3)		Add single digit numbers with totals to 10 , (N1/E1.4) Subtract single digit numbers from numbers up to 10 (N1/E1.5)
Recognise and interpret the symbols +, – and = appropriately (SCS4)		Interpret +, – and = in practical situations for solving problems (N1/E1.6)

Content - Using common measures, shape and space

New Functional Skills Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Recognise coins and notes and write them in numbers with the correct symbols (£ & p) , where these involve numbers up to 20 (SCS5)	Recognise and select coins and notes	Recognise and select coins and notes (MSS1/E1.1)
Read 12 hour digital and analogue clocks in hours (SCS6)		Relate familiar events to times of the day (using o'clock times or parts of the day such as midday), days of the week, seasons of the year (MSS1/E1.2)
Know the number of days in a week, months and seasons in a year . Be able to name and sequence (SCS7)		
Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity (SCS8)	Describe the properties of size and measure, including length, width, height and weight, and make simple comparisons	Describe size and use direct comparisons for the size of at least two items (MSS1/E1.3); describe length, width, height, and use direct comparisons for length, width, height of items (MSS1/E1.4);

		describe weight and use direct comparisons for weight items (MSS1/E1.5); describe capacity of items and use direct comparisons for capacity of items (MSS1/E1.6)
Identify and recognise common 2-D and 3-D shapes including circle, cube, rectangle (including square) and triangle (SCS9)	Recognise and name common 2-D and 3-D shapes	Recognise and name common 2D and 3D shapes e.g. a rectangle, square, circle, cube(MSS2/E1.1)
Use everyday positional vocabulary to describe position and direction including left, right, in front, behind, under and above (SCS10)	Describe position	Understand everyday positional vocabulary e.g. between, inside or near to (MSS2/E1.2)

Content - Handling information and data

New Functional Skills Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Read numerical information from lists (SCS11)		Extract simple information from lists (HD1/E1.1)
Sort and classify objects using a single criterion (SCS12)	Sort and classify objects practically using a single criterion	Sort and classify objects using a single criterion (HD1/E1.2)
Read and draw simple charts and diagrams including a tally chart, block diagram/graph (SCS13)		Construct simple representations or diagrams using knowledge of numbers, measures or space and shape (HD1/E1.3)

Examples of how the new content could be assessed:



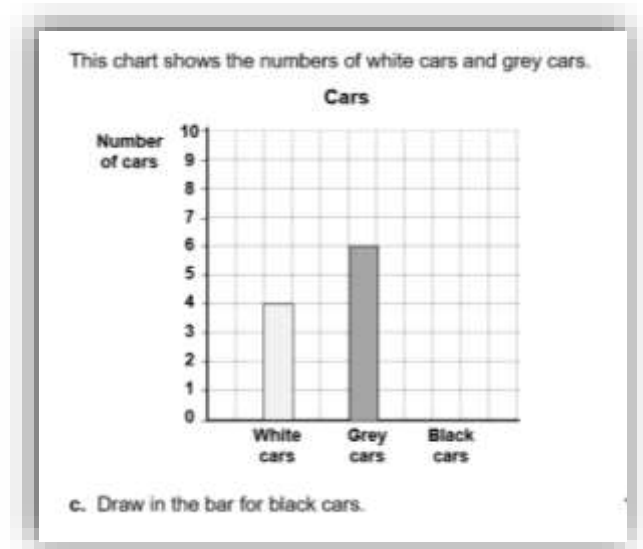
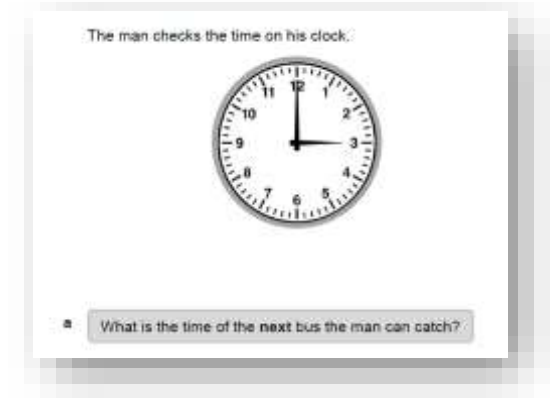
Work out $20 - 13 =$

.....

Add numbers which total up to 20, and subtract numbers from numbers up to 20 (SCS3)
Previously learners were required to subtract single digit numbers from numbers up to 10.

Read 12 hour digital and analogue clocks in hours (SCS6)

Reading digital or analogue clock was not previously assessed, learners were previously required to relate to familiar times of the day (numeracy standards).



Read and draw simple charts and diagrams including a tally chart, block diagram/graph (SCS13)
Learners were previously required to sort and classify objects using a single criterion, constructing simple representations could be found previously in the numeracy standards.

Entry 2 – Functional Skills Mathematics

Entry 2 Introduction:

New content at this level:

- Divide two-digit whole numbers by single-digit whole numbers and express remainders (SCS8)
- Know the number of hours in a day and weeks in a year. Be able to name and sequence. (SCS7) *(This should be in Measures - error in the DfE content document)*

Content that is not new but is now described more explicitly or in greater detail detailed:

- Count reliably up to 100 items (SCS1)
- Read, write, order and compare numbers up to 200 (SCS2)
- Recognise and sequence odd and even numbers up to 100 (SCS3)
- Recognise and interpret the symbols $+$, $-$, \times , \div and $=$ appropriately (SCS4)
- Multiply whole numbers in the range 0×0 to 12×12 (times tables) (SCS6)
- Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes (SCS10)
- Read, write and use decimals to one place (SCS11)
- 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 (SCS13)
- Recognise and name 2-D and 3-D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres (SCS19)
- Describe the properties of common 2-D and 3-D shapes including sides, corners, edges, faces, angles and base (SCS20)
- Extract information from lists, tables, diagrams and bar charts (SCS22)
- Make numerical comparisons from bar charts (SCS23)
- Take information from one format and represent the information in another format including use of bar charts (SCS25)

Content - Number

New Functional Skills Content Statements	Current Functional Skills criteria	Adult Numeracy Standards
Count reliably up to 100 items (SCS1)	Understand and use whole numbers with up to two significant figures	Count reliably up to 20 items (now Entry 1) (N1/E2.1)
Read, write, order and compare numbers up to 200 (SCS2)		Read, write, order and compare numbers up to 100 (N1/E2.2)
Recognise and sequence odd and even numbers up to 100 (SCS3)	Recognise sequences of numbers, including odd and even numbers	
Recognise and interpret the symbols +, -, x, ÷ and = appropriately (SCS4)		Use and interpret +, -, x and = in practical situations for solving problems (N1/E2.7)
Add and subtract two-digit numbers (SCS5)	Understand and use addition/subtraction in practical situations	Add and subtract two-digit whole numbers (N1/E2.3); recall addition and subtraction facts to 10 (N1/E2.4)
Multiply whole numbers in the range 0x0 to 12x12 (times tables) (SCS6)		Multiply using single-digit whole numbers (N1/E2.5)
Know the number of hours in a day and weeks in a year. Be able to name and sequence. (SCS7) <i>(This should be in Measures - error in the DfE content document)</i>		
Divide two-digit whole numbers by single-digit whole numbers and express remainders (SCS8)		
Approximate by rounding to the nearest 10, and use this rounded answer to check results (SCS9)		Approximate by rounding to the nearest 10 (N1/E2.6)
Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes (SCS10)	Use doubling and halving in practical situations	Read, write and compare halves and quarters of quantities (N2/E2.1); find halves and quarters of small numbers of items or shapes (N2/E2.2)
Read, write and use decimals to one place (SCS11)		

Content - Using common measures, shape and space

New Functional Skills Content Statements	Current Functional Skills criteria	Adult Numeracy Standards
Calculate money with pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p) (SCS12)	Recognise and use familiar measures, including time and money	Make amounts of money up to £1 in different ways using 1p, 2p, 5p, 10p, 20p, 50p coins (MSS1/E2.1); calculate the cost in pence of more than one item and the change from a transaction, in pence or in whole pounds (MSS1/E2.2)
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 (SCS13)		Read and record time in common date formats (MSS1/E2.3), read and understand time displayed on analogue and 12-hour digital clocks in hours, half hours and quarter hours (MSS1/E2.4)
Know the number of hours in a day and weeks in a year . Be able to name and sequence (SCS7)		
Use metric measures of length including millimetres, centimetres and metres and kilometres (SCS14)	Use simple scales and measure to the nearest labelled division	Estimate, measure and compare length using common standard and non-standard units (MSS1/E2.5)
Use measures of weight including grams and kilograms (SCS15)		Estimate, measure and compare weight using common standard and non-standard units (MSS1/E2.6)
Use measures of capacity including millilitres and litres (SCS16)		Estimate, measure and compare capacity using common standard and non-standard units (MSS1/E2.7)
Read and compare positive temperatures (SCS17)		Read and compare positive temperatures in everyday situations such as weather charts (MSS1/E2.8)
Read and use simple scales to the nearest labelled division (SCS18)		Read simple scales to the nearest labelled division (MSS1/E2.9)
Recognise and name 2-D and 3-D shapes including pentagons , hexagons , cylinders, cuboids, pyramids and spheres (SCS19)	Know properties of simple 2-D and 3-D shapes	Recognise and name 2-D and 3-D shapes e.g. triangles, cylinders, pyramids (MSS2/E2.1)
Describe the properties of common 2-D and 3-D shapes including sides, corners, edges, faces, angles and base (SCS20)		Describe the properties of common 2-D and 3-D shapes e.g. the number of sides, corners, faces (MSS2/E2.2)
Use appropriate positional vocabulary to describe position and direction including between, inside,		Use positional vocabulary, e.g. giving simple instructions (MSS2/E2.3)


outside, middle, below, on top, forwards and backwards (SCS21)		
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Content - Handling information and data

New Functional Skills Content Statements	Current Functional Skills criteria	Adult Numeracy Standards
Extract information from lists, tables, diagrams and bar charts (SCS22)	Extract information from simple lists	Extract information from lists, tables, simple diagrams and block graphs (HD1/E2.1)
Make numerical comparisons from bar charts (SCS23)		Make numerical comparisons from block graphs (HD1/E2.2)
Sort and classify objects using two criteria (SCS24)		Sort and classify objects using two criteria (HD1/E2.3)
Take information from one format and represent the information in another format including use of bar charts (SCS25)		Collect simple numerical information(HD1/E2.4) ; represent information so that it makes sense to others e.g. in lists, tables and diagrams (HD1/E2.5)

Examples of how the new content might be assessed:

Q8 A passenger's flight leaves at twelve o'clock. He checks his watch.



a Has his plane left?

Write down how you got your answer.

1 mark

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 (SCS13)

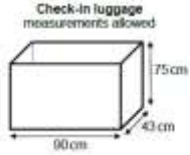
Previously learners needed to recognise and use familiar measures, including time and money. Delivery will now need to include the use of analogue and digital clocks.

Recognise and name 2-D and 3-D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres (SCS19)

Learners previously needed to know the properties of simple and 2-D and 3-D shapes. These will now include pentagons, hexagons and spheres as well as cylinders, cuboids and pyramids,

Q5 This diagram shows the maximum measurements for hand luggage that you are allowed to check-in on a plane.

It is a box, shaped like a cuboid, with sides and a base, but no top.



Check-in luggage measurements allowed

90 cm, 43 cm, 75 cm

a What shape is the base of the box?

1 mark

Q4 The weather forecast for the UK next week is 21 °C every day. Here is the weather forecast for Spain next week.

Weather forecast for Spain						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
23°C	22°C	19°C	20°C	24°C	26°C	25°C

a Which days will be warmer in Spain than in the UK? Tick all those days.

2 marks

Extract information from lists, tables, diagrams and bar charts (SCS22)

This has changed from learners extracting from only simple lists, to include tables, diagrams and bar charts.

Entry 3 – Functional Skills Mathematics

Entry 3 Introduction:

New content at this level:

- Recognise and continue sequences that involve decimals (SCS9)
- Round amounts of money to the nearest £1 or 10p (SCS11)
- Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns (SCS20)

Content that is not new but is now described more explicitly or in greater detail detailed:

- Count, read, write, order and compare numbers up to 1000 (SCS1)
- Divide three-digit whole numbers by single and double digit whole numbers and express remainders (SCS3)
- Multiply two-digit whole numbers by single and double digit whole numbers (SCS4)
- Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results (SCS5)
- Recognise and continue linear sequences of numbers up to 100 (SCS6)
- Read, measure and record time using am and pm (SCS12)
- Read time from analogue and 24 hour digital clocks in hours and minutes (SCS13)
- Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division (SCS14)
- Compare metric measures of length including millimetres, centimetres, metres and kilometres (SCS15)
- Compare measures of weight including grams and kilograms (SCS16)
- Compare measures of capacity including millilitres and litres (SCS17)
- Use a suitable instrument to measure mass and length (SCS18)
- Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles (SCS19)
- Extract information from lists, tables, diagrams and charts and create frequency tables (SCS21)
- Interpret information, to make comparisons and record changes, from different formats including bar charts and simple line graphs (SCS22)
- Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts (SCS23)

The new Subject Content Statements (SCS) are set out below alongside the equivalent criteria (where it exists) from the legacy Functional Skills specification and the Adult Numeracy Core Curriculum. New content or changes are indicated in red.

Content - Number

New Functional Skills Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Count, read, write, order and compare numbers up to 1000 (SCS1)		Count, read, write, order and compare numbers up to 1000 (N1/E3.1)
Add and subtract using three-digit whole numbers (SCS2)	Add and subtract using three-digit numbers	Add and subtract using three-digit numbers (N1/E3.2); recall addition and subtraction facts up to 20 (N1/E3.3)
Divide three-digit whole numbers by single and double digit whole numbers and express remainders (SCS3)	Solve practical problems involving multiplication and division by 2, 3, 4, 5 and 10	Divide two-digit whole numbers by single-digit whole numbers and interpret remainders (N1/E3.6)
Multiply two-digit whole numbers by single and double digit whole numbers (SCS4)		Multiply two-digit whole numbers by single-digit whole numbers (N1/E3.4); recall multiplication facts e.g. multiples of 2, 3, 4, 5, 10 (N1/E3.5)
Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results (SCS5)	Round to the nearest 10 or 100	Approximate by rounding numbers less than 1000 to the nearest 10 or 100 (N1/E3.7)
Recognise and continue linear sequences of numbers up to 100 (SCS6)	Recognise and describe number patterns	Use and interpret +, -, x, ÷ and = in practical situations for solving problems (N1/E3.9)
Read, write and understand thirds, quarters, fifths and tenths including equivalent forms (SCS7)	Understand and use simple fractions	Read, write and understand common fractions, e.g. $\frac{3}{4}$, $\frac{2}{3}$, $\frac{1}{10}$ (N2/E3.1) ; recognise and use equivalent forms, e.g. $\frac{5}{10} = \frac{1}{2}$ (N2/E3.2)
Read, write and use decimals up to two decimal places (SCS8)	Understand decimals to two decimal places in practical contexts	Read, write, and understand decimals up to two decimal places in practical contexts (such as common measures to one decimal place, e.g. 1.5m; money in decimal notation e.g. £2.37) (N2/E3.3)
Recognise and continue sequences that involve decimals (SCS9)		
		Estimate answers to calculations (N1/E3.8)

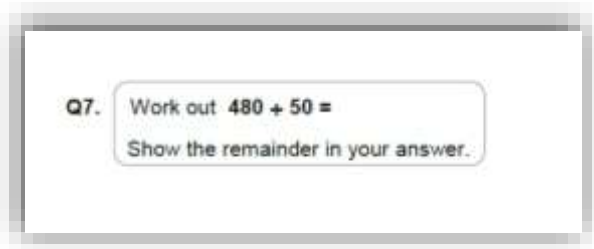
Content - Using common measures, shape and space

Reformed Functional Skills – Subject Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Calculate with money using decimal notation and express money correctly in writing in pounds and pence (SCS10)	Complete simple calculations involving money and measures	Add and subtract sums of money using decimal notation (MSS1/E3.1)
Round amounts of money to the nearest £1 or 10p (SCS11)		Round sums of money to the nearest £ and 10p and make approximate calculations (MSS1/E3.2)
Read, measure and record time using am and pm (SCS12)		Read, measure and record time using am and pm and common date formats, digital clocks and analogue clocks to the nearest 5 minute intervals (MSS1/E3.3)
Read time from analogue and 24 hour digital clocks in hours and minutes (SCS13)		
Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division (SCS14)	Understand, estimate, measure and compare length, capacity, weight and temperature; Use metric units in everyday situations	Read, estimate, measure and compare length (MSS1/E3.5) , capacity (MSS1/E3.7) , weight (MSS1/E3.6) and temperature (MSS1/E3.9) using non-standard and standard units e.g. distance on road signs, simple scales to the nearest labelled division
Compare metric measures of length including millimetres, centimetres, metres and kilometres (SCS15)		
Compare measures of weight including grams and kilograms (SCS16)		
Compare measures of capacity including millilitres and litres (SCS17)		
Use a suitable instrument to measure mass and length (SCS18)		
Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles (SCS19)	Recognise and name simple 2-D and 3-D shapes and their properties	Sort 2-D and 3-D shapes to solve practical problems using properties, e.g. lines of symmetry, side length, angles (MSS2/E3.1)
Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns (SCS20)		

Content - Handling information and data

Reformed Functional Skills – Subject Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Extract information from lists, tables, diagrams and charts and create frequency tables (SCS21)	Extract use and compare information from lists, tables, simple charts and simple graphs	Extract numerical information from lists, tables, diagrams and simple charts (HD1/E3.1)
Interpret information, to make comparisons and record changes, from different formats including bar charts and simple line graphs (SC22)		Make numerical comparisons from bar charts and pictograms (HD1/E3.2)
Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts (SCS23)		Make observations and record numerical information using a tally (HD1/E3.3); organise and represent information in different ways so that it makes sense to others (HD1/E3.4)

Examples of how the new content might be assessed:



Divide three- digit whole numbers by single and double-digit whole numbers and express remainders (SCS3)

These previously required learners to multiply and divide two-digit numbers by single digit numbers in practical problems (multiply and divide by 2,3,4,5 and 10).

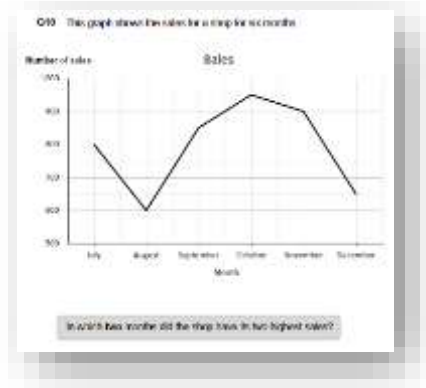
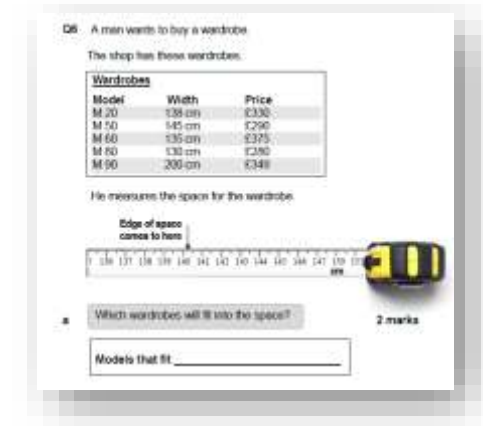
These examples demonstrate how this is used in the non-calculator and calculator scenario.



Compare metric measures of length including millimetres, centimetres, metres and kilometres (SCS15)

Previously learners needed to demonstrate they can understand, estimate, measure and compare length, capacity, weight and temperature; Use metric units in everyday situations.

This example shows how comparing measure is used in an everyday situation.



Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts (SCS23)

Learners were previously required to extract use and compare information for lists, tables, simple chart and simple graphs. When delivering these topics we need to ensure that all types of charts and graphs are covered.

Level 1 – Functional Skills Mathematics

Level 1 Introduction:

New content at this level:

- Follow the order of precedence of operators (SCS7)
- Calculate discounts in multiples of 5% on amounts of money (SCS19)
- Interpret plans, elevations and nets of simple 3-D shapes (SCS25)
- Use angles when describing position and direction, and measure angles in degrees (SCS26)
-

Content that is not new but is now described more explicitly or in greater detail detailed:

- Recognise and use positive and negative numbers (SCS2)
- Use multiplication facts and make connections with division facts (SCS4)
- Calculate the squares of one-digit and two-digit numbers (SCS6)
- Add, subtract, multiply and divide decimals up to two decimal places (SCS11)
- Approximate by rounding to a whole number or to one or two decimal places (SCS12)
- Read, write, order and compare percentages in whole numbers (SCS13)
- Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof (SCS14)
- Estimate answers to calculations using fractions and decimals (SCS15)
- Recognise and calculate equivalences between common fractions, percentages and decimals (SCS16)
- Calculate simple interest in multiples of 5% on amounts of money (SCS18)
- Calculate the volumes of cubes and cuboids (SCS23)
- Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs (SCS27)
- Group discrete data and represent grouped data graphically (SCS28)
- Use equally likely outcomes to find the probabilities of simple events and express them as fractions (SCS31)

The new Subject Content Statements (SCS) are set out below alongside the equivalent criteria (where it exists) from the legacy Functional Skills specification and the Adult Numeracy Core Curriculum. New content or changes are indicated in red.

Content - Number

New Functional Skills Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Read, write, order and compare large numbers (up to one million) (SCS1)	Understand and use whole numbers and understand negative numbers in practical contexts	Read, write, order and compare large numbers (N1/L1.1)
Recognise and use positive and negative numbers (SCS2)		Recognise negative numbers in practical contexts e.g. temperature (N1/L1.2)
Multiply and divide whole numbers and decimals by 10, 100, 1000 (SCS3)	Add, subtract, multiply and divide whole numbers using a range of strategies	Add, subtract, multiply and divide using efficient written methods (N1/L1.3); multiply and divide whole numbers by 10 and 100; multiply and divide decimals by 10, 100 (N1/L1.4)
Use multiplication facts and make connections with division facts (SCS4)		Recall multiplication facts up to 10 x 10 and make connections with division facts (N1/L1.5)
Use simple formulae expressed in words for one- or two-step operations (SCS5)	Use simple formulae expressed in words for one- or two-step operations	
Calculate the squares of one-digit and two-digit numbers (SCS6)		Recognise numerical relationships e.g. multiples and squares (N1/L1.6)
Follow the order of precedence of operators (SCS7)		
Read, write, order and compare common fractions and mixed numbers (SCS8)		Read, write, order and compare common fractions and mixed numbers (N2/L1.1)
Find fractions of whole number quantities or measurements (SCS9)	Understand and use equivalences between common fractions, decimals and percentages	Find parts of whole number quantities or measurements e.g. $\frac{2}{3}$ or $\frac{3}{4}$ (N2/L1.2)
Read, write, order and compare decimals up to three decimal places (SCS10)		Read, write, order and compare decimals up to three decimal places (N2/L1.14)
Add, subtract, multiply and divide decimals up to two decimal places (SCS11)		Add, subtract, multiply and divide decimals up to two decimal places (N2/L1.5)
Approximate by rounding to a whole number or to one or two decimal places (SCS12)		Approximate whole numbers by rounding (N1/L1.8); approximate decimals by rounding to a whole number or two decimal places (N2/L1.7)
Read, write, order and compare percentages in whole numbers (SCS13)		Read, write, order and compare simple percentages e.g. 10%, 25%; find simple percentage parts of quantities and measurements (N2/L1.8)
Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof (SCS14)		Find simple percentage increase and decrease e.g. 10% rise in cost, 20 % off in a sale (N2/L1.10)

Estimate answers to calculations using fractions and decimals (SCS15)		Estimate answers to calculations (N1/L1.9)
Recognise and calculate equivalences between common fractions, percentages and decimals (SCS16)		Recognise equivalences between common fractions, decimals and percentages, and use these to find part of whole number quantities to express likelihood or probability (N2/L1.3)
Work with simple ratio and direct proportion (SCS17)	Solve simple problems involving ratio, where one number is a multiple of the other	Work out simple ratio and direct proportion e.g. three parts to one part (N1/L1.7)
Content - Using common measures, shape and space		
Reformed Functional Skills – Subject Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Calculate simple interest in multiples of 5% on amounts of money (SCS18)		Add, subtract, multiply, divide and record sums of money and record (MSS1/L1.1)
Calculate discounts in multiples of 5% on amounts of money (SCS19)		
Convert between units of length, weight, capacity, money and time, in the same system (SCS20)	Convert units of measure in the same system	Calculate within the same system by adding and subtracting common units of measure (MSS1/L1.6); converting units of measure in the same system (MSS1/L1.7)
Recognise and make use of simple scales on maps and drawings (SCS21)	Solve problems requiring calculation, with common measures, including money, time, length, weight, capacity and temperature	
Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles (SCS22)	Work out areas and perimeters in practical situations	Work out the perimeter of simple shapes (MSS1/L1.8); Work out the area of rectangles (MSS1/L1.9)
Calculate the volumes of cubes and cuboids (SCS23)		Work out simple volume e.g. cuboids (MSS1/L1.10)
Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles (SCS24)	Construct geometric diagrams, models and shapes	Solve problems using the mathematical properties of regular 2-D shapes, e.g. tessellation or symmetry (MSS2/L1.1); draw 2-D shapes in different orientations using grids, e.g. in diagrams or plans (MSS2/L1.2)
Interpret plans, elevations and nets of simple 3-D shapes (SCS25)		

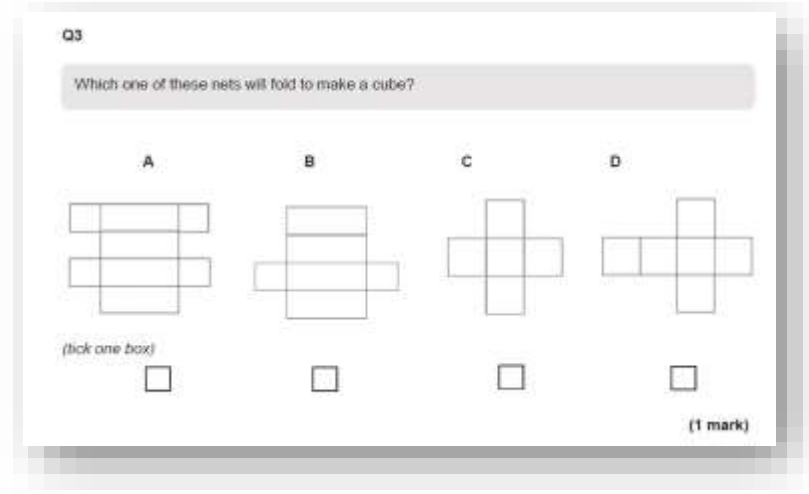
Use angles when describing position and direction, and measure angles in degrees (SCS26)		
Content - Handling information and data		
Reformed Functional Skills – Subject Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs (SCS27)	Collect and record discrete data and organise and represent information in different ways	Collect, organise and represent discrete data e.g. in tables, charts, diagrams and line graphs (HD1/L1.1)
Group discrete data and represent grouped data graphically (SCS28)	Collect and record discrete data and organise and represent information in different ways	
Find the mean and range of a set of quantities (SCS29)	Find mean and range	Find the arithmetical average (mean); find the range for a set of data (HD1/L1.3)
Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events (SCS30)	Use data to assess the likelihood of an outcome	Express the likelihood of an event using fractions, decimals and percentages with the probability scale of 0 to 1 (HD2/L1.2)
Use equally likely outcomes to find the probabilities of simple events and express them as fractions (SCS31)		Show that some events are more likely to occur than others (HD2/L1.1)
		Extract and interpret information, e.g. in tables, diagrams, charts and line graphs (now at Entry 3 in new Functional Skills) (HD1/L1.1)

Examples of how the new content might be assessed:



Add, subtract, multiply and divide decimals up to two decimal places (SCS11)
Previously learners only demonstrated add and subtract decimals up to two decimal places.

Interpret plans, elevations and nets of simple 3-D shapes (SCS25)
New assessments will include elevations and nets to 3D shapes



Group discrete data and represent grouped data graphically (SCS28)
Currently learners collect and record discrete data and organise and represent information in different ways



Level 2 – Functional Skills Mathematics

Level 2 Introduction:

New content at this level:

- Calculate percentage change (any size increase and decrease), and original value after percentage change (SCS6)
- Follow the order of precedence of operators, including indices (SCS12)
- Calculate using compound measures including speed, density and rates of pay (SCS13)
- Use coordinates in 2-D, positive and negative, to specify the positions of points (SCS19)
- Draw 3-D shapes to include plans and elevations (SCS21)
- Calculate values of angles and/or coordinates with 2-D and 3-D shapes (SCS22)
- Estimate the mean of a grouped frequency distribution from discrete data (SCS24)
- Work out the probability of combined events including the use of diagrams and tables, including two-way tables (SCS26)
- Draw and interpret scatter diagrams and recognise positive and negative correlation (SCS28)

Content that is not new but is now described more explicitly or in greater detail detailed:

- Work out percentages of amounts and express one amount as a percentage of another (SCS5)
- Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers (SCS7)
- Express one number as a fraction of another (SCS8)
- Order, approximate and compare decimals (SCS9)
- Add, subtract, multiply and divide decimals up to three decimal places (SCS10)
- Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting (SCS13)
- Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders) (SCS17)

The new Subject Content Statements (SCS) are set out below alongside the equivalent criteria (where it exists) from the legacy Functional Skills specification and the Adult Numeracy Core Curriculum. New content or changes are indicated in red.

Content - Number

Reformed Functional Skills – Subject Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Read, write, order and compare positive and negative numbers of any size (SCS1)	Understand and use positive and negative numbers of any size in practical contexts	Read, write, order and compare positive and negative numbers of any size in a practical context (N1/L2.1)
Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation (SCS2)	Carry out calculations with numbers of any size in practical contexts, to a given number of decimal places	Carry out calculations with numbers of any size using efficient methods (N1/L2.2)
Evaluate expressions and make substitutions in given formulae in words and symbols (SCS3)	Understand and use simple formulae and equations involving one- or two-step operations	Evaluate expressions and make substitutions in given formulae in words and symbols to produce results (N1/L2.4)
Identify and know the equivalence between fractions, decimals and percentages (SCS4)	Understand and use equivalences between fractions, decimals and percentages	Use fractions to identify equivalences with decimals and percentages (N2/L2.1)
Work out percentages of amounts and express one amount as a percentage of another (SCS5)		Use percentages to evaluate one number as a percentage of another (N2/L2.9)
Calculate percentage change (any size increase and decrease), and original value after percentage change (SCS6)		Order and compare percentages and understand percentage increase and decrease, e.g. VAT or 20% reduction in a sale (N2/L2.7)
Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers (SCS7)		Use fractions to order and compare (N2/L2.1) ; use fractions to add and subtract amounts or quantities (N2/L2.4)
Express one number as a fraction of another (SCS8)		Use fractions to evaluate one number as a fraction of another (N2/L2.3)
Order, approximate and compare decimals (SCS9)		Order, approximate and compare decimals when solving practical problems (N2/L2.5)
Add, subtract, multiply and divide decimals up to three decimal places (SCS10)		Add , subtract, multiply and divide decimals up to three places (N2/L2.6)
Understand and calculate using ratios, direct proportion and inverse proportion (SCS11)	Understand, use and calculate ratio and proportion, including problems involving scale	Calculate ratio and direct proportion e.g. 3:2 (N1/L2.3)
Follow the order of precedence of operators, including indices (SCS12)		

Content - Using common measures, shape and space

Reformed Functional Skills – Subject Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting (SCS13)		Calculate with sums of money and to convert between currencies (MSS1/L2.1) Estimate, measure and compare length, weight, capacity and temperature using metric and, where appropriate, imperial units (MSS1/L2.3) ; calculate with units within the same system and between systems using a conversion table and scales and approximate conversion factors (MSS1/L2.6)
Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph (SCS14)	Use, convert and calculate using metric and, where appropriate, imperial measures	
Calculate using compound measures including speed, density and rates of pay (new) (SCS15)		Calculate, measure and record time in different formats (MSS1/L2.2)
Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles) (SCS16)	Find area, perimeter and volume of common shapes	Understand and use given formulae for finding perimeters and areas of regular shapes (MSS1/L2.7) ; finding areas of composite shapes (MSS1/L2.8)
Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders) (SCS17)		Understand and use given formulae for finding volumes of regular shapes (MSS1/L2.9)
Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements (SCS18)		Work out dimensions from scale drawings (MSS1/L2.10)
Use coordinates in 2-D, positive and negative, to specify the positions of points (new) (SCS19)		
Understand and use common 2-D representations of 3-D objects (SCS20)	Recognise and use 2-D representations of 3-D objects	Recognise and use 2-D representations of 3-D objects e.g. in maps and plans (MSS2/L2.1); solve problems involving 2-D shapes and parallel lines, e.g. in laying down carpet tiles (MSS2/L2.2)
Draw 3-D shapes to include plans and elevations (new) (SCS21)		

Calculate values of angles and/or coordinates with 2-D and 3-D shapes (new) (SCS22)

Content - Handling information and data

New Functional Skills Content Statements	Legacy Functional Skills criteria	Adult Numeracy Standards
Calculate the median and mode of a set of quantities (SCS23)		
Estimate the mean of a grouped frequency distribution from discrete data (SCS24)		
Use the mean, median, mode and range to compare two sets of data (SCS25)		Find the mean, median, mode and use them as appropriate to compare two sets of data (HD1/L2.3); find the range and use it to describe the spread within sets of data (HD1/L2.4)
Work out the probability of combined events including the use of diagrams and tables, including two-way tables (SCS26)	Use statistical methods to investigate situations	Use probability to identify the range of possible outcomes of combined events and record information using diagrams and table (HD2/L2.1)
Express probabilities as fractions, decimals and percentages (SCS27)	Use probability to assess the likelihood of an outcome	
Draw and interpret scatter diagrams and recognise positive and negative correlation (SCS28)	Use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using ICT where appropriate	
	Collect and represent discrete and continuous data, using ICT where appropriate (part now at Level 1)	Extract discrete and continuous data (HD1/L2.1); collect, organise and represent discrete and continuous data from tables, charts, diagrams and line graphs (HD1/L2.2)

Examples of how the new content might be assessed:

Q12 A woman applies for a new job that pays £8.50 a week more (after tax).
She will work 5 days a week and drive to work, as she does in her job now.
The new job is 6 miles further from her house.

**Her car travels 8.5 miles per litre of petrol
Petrol costs £1.26 per litre**

Will the woman be better off with the new job after she takes the petrol into consideration?
Explain your answer. Include calculations to support your decision.

Calculate using compound measures including speed, density and rates of pay (SCS15)
New content to this level, calculations using rates of pay will need to be covered within delivery.

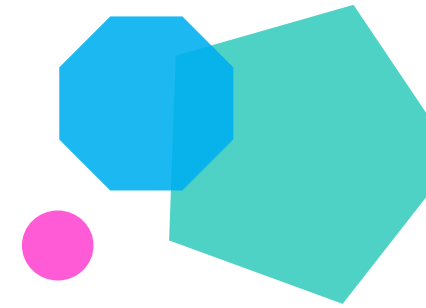
Use coordinates in 2-D, positive and negative, to specify the positions of points (SCS19)
This example shows how coordinates can be used within a question.

Which point is at (3,4)?

Q6

Calculate the size of angle A.

Calculate values of angles and/or coordinates with 2-D and 3-D shapes (SCS22)



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