

# Functional Skills: Mathematics – Content mapping

Key:

New content/requirement

Content moved from a previously higher level in the current specifications

## Entry Level 1

DfE Subject content Functional Skills: Mathematics (Feb 2018)	Place in current Edexcel Functional Skills Mathematics 2010 Specifications	Place in Pearson Edexcel GCSE (9-1) in Mathematics Specification
<b>Entry Level 1 – using numbers and the number system – whole numbers</b>		
1. Read, write, order and compare numbers up to 20	Entry 1, presently to one significant figure	N/A
2. Use whole numbers to count up to 20 items including zero	Entry 1, presently to one significant figure	N/A
3. Add numbers which total up to 20, and subtract numbers from numbers up to 20	Entry 1, presently to one significant figure	N/A
4. Recognise and interpret the symbols +, – and = appropriately	Not presently stated	N/A
<b>Entry Level 1 – using common measures, shape and space</b>		
5. Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20	Entry 1, presently to one significant figure Extra entry 2	N/A
6. Read 12 hour digital and analogue clocks in hours	Entry 2	N/A
7. Know the number of days in a week, months, and seasons in a year. Be able to name and sequence	Entry 2 and entry 3	Underlying knowledge
8. Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity	Entry 1	N/A
9. Identify and recognise common 2-D and 3-D shapes including circle, cube, rectangle (incl. square) and triangle	Entry 1	N/A
10. Use everyday positional vocabulary to describe position and direction including left, right, in front, behind, under and above	Entry 1	N/A

### Entry Level 1 – handling information and data

11. Read numerical information from lists	Entry 2	N/A
12. Sort and classify objects using a single criterion	Entry 1	N/A
13. Read and draw simple charts and diagrams including a tally chart, block diagram/graph	Entry 3	N/A

### Entry Level 2

DfE Subject content Functional Skills: Mathematics (Feb 2018)	Place in current Edexcel Functional Skills Mathematics 2010 Specifications	Place in Pearson Edexcel GCSE (9-1) in Mathematics Specification
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#### Entry Level 2 – using numbers and the number system – *whole numbers, fractions and decimals*

1. Count reliably up to 100 items	Entry 2, presently two significant figures	N/A
2. Read, write, order and compare numbers up to 200	Entry 2, presently two significant figures	N/A
3. Recognise and sequence odd and even numbers up to 100	Entry 2, presently two significant figures	Understand terms and use foundation
4. Recognise and interpret the symbols +, −, ×, ÷ and = appropriately	Not presently stated	Underlying knowledge
5. Add and subtract two-digit numbers	Entry 2, presently two significant figures	Underlying knowledge
6. Multiply whole numbers in the range 0x0 to 12x12 (times tables)	Entry 3 (partial, only 2,3,4,5 and 10)	Underlying knowledge
7. Know the number of hours in a day and weeks in a year. Be able to name and sequence	Entry 3 and level 1	Underlying knowledge
8. Divide two-digit whole numbers by single-digit whole numbers and express remainders	Entry 3 (partial, only 2,3,4,5 and 10)	N/A
9. Approximate by rounding to the nearest 10, and use this rounded answer to check results	Entry 3	N/A
10. Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes	Entry 3	N/A
11. Read, write and use decimals to one decimal place	Entry 3	N/A

#### Entry Level 2 – 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)	Entry 2 and Entry 3	N/A
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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	Entry 2	N/A
14. Use metric measures of length including millimetres, centimetres, metres and kilometres	Entry 1,2 and 3	Underlying knowledge
15. Use measures of weight including grams and kilograms	Entry 1,2 and 3	Underlying knowledge
16. Use measures of capacity including millilitres and litres	Entry 3	Underlying knowledge
17. Read and compare positive temperatures	Entry 3	N/A
18. Read and use simple scales to the nearest labelled division	Entry 2	N/A
19. Recognise and name 2-D and 3-D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres	Entry 2 and Entry 3	Foundation <b>G4/G12</b>
20. Describe the properties of common 2-D and 3-D shapes including numbers of sides, corners, edges, faces, angles and base	Entry 2, Entry 3 and Level 1	Foundation (vertices) <b>G1</b>
21. Use appropriate positional vocabulary to describe position and direction including between, inside, outside, middle, below, on top, forwards and backwards	Entry 1	N/A
<b>Entry Level 2 – handling information and data</b>		
22. Extract information from lists, tables, diagrams and bar charts	Entry 3	Underlying knowledge
23. Make numerical comparisons from bar charts	Entry 3	N/A
24. Sort and classify objects using two criteria	Not in present specification	N/A
25. Take information from one format and represent the information in another format including use of bar charts	Level 1 (eg table to bar chart)	N/A

## Entry Level 3

DfE Subject content Functional Skills: Mathematics (Feb 2018)	Place in current Edexcel Functional Skills Mathematics 2010 Specifications	Place in Pearson Edexcel GCSE (9-1) in Mathematics Specification
<b>Entry Level 3 – using numbers and the number system – whole numbers, fractions and decimals</b>		
1. Count, read, write, order and compare numbers up to 1000	Entry 3 presently 3 digit numbers Level 1	N/A
2. Add and subtract using three-digit whole numbers	Entry 3	N/A
3. Divide three-digit whole numbers by single and double digit whole numbers and express remainders	Entry 3 and Level 1	N/A
4. Multiply two-digit whole numbers by single and double digit whole numbers	Entry 3 and Level 1	N/A
5. Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results	Entry 3 and Level 1	N/A
6. Recognise and continue linear sequences of numbers up to 100	Entry 3 (partial)	Foundation <b>A23</b>
7. Read, write and understand thirds, quarters, fifths and tenths including equivalent forms	Entry 3 and Level 1	N/A
8. Read, write and use decimals up to two decimal places	Entry 3	N/A
9. Recognise and continue sequences that involve decimals	Not in present specification	Foundation <b>A23</b>
<b>Entry Level 3 – using common measures, shape and space</b>		
10. Calculate with money using decimal notation and express money correctly in writing in pounds and pence	Entry 3 and Level 1	Foundation <b>N13</b>
11. Round amounts of money to the nearest £1 or 10p	Not in present specification	N/A
12. Read, measure and record time using am and pm	Entry 3 and Level 1	N/A
13. Read time from analogue and 24 hour digital clocks in hours and minutes	Entry 3 and Level 1	N/A
14. Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division	Entry 3 and Level 1	N/A

15. Compare metric measures of length including millimetres, centimetres, metres and kilometres	Entry 3 and Level 1	N/A
16. Compare measures of weight including grams and kilograms	Entry 3 and Level 1	N/A
17. Compare measures of capacity including millilitres and litres	Entry 3 and Level 1	N/A
18. Use a suitable instrument to measure mass and length	Entry 3 and Level 1	N/A
19. Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles	Not in present specification	N/A
20. Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns	Not in present specification	N/A
<b>Entry Level 3 – handling information and data</b>		
21. Extract information from lists, tables, diagrams and charts and create frequency tables	Not in present specification	N/A
22. Interpret information, to make comparisons and record changes, from different formats including bar charts and simple line graphs	Level 1	Foundation <b>S2</b>
23. Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts	Level 1	Foundation <b>S2</b>

## Level 1

DfE Subject content Functional Skills: Mathematics (Feb 2018)	Place in current Edexcel Functional Skills Mathematics 2010 Specifications	Place in Pearson Edexcel GCSE (9-1) in Mathematics Specification
<b>Level 1 – using numbers and the number system – whole numbers, fractions, decimals and percentages</b>		
1. Read, write, order and compare large numbers (up to one million)	Level 1 ( presently no upper limit)	N/A
2. Recognise and use positive and negative numbers	Level 1	Foundation <b>N1</b>
3. Multiply and divide whole numbers and decimals by 10, 100, 1000	Level 1	N/A
4. Use multiplication facts and make connections with division facts	Level 1	Foundation <b>N3</b>
5. Use simple formulae expressed in words for one or two-step operations	Level 1	Foundation <b>A2</b>
6. Calculate the squares of one-digit and two-digit numbers	Entry 3 (partial)	Foundation <b>N6</b>
7. Follow the order of precedence of operators	BIDMAS throughout.	BIDMAS throughout.
8. Read, write, order and compare common fractions and mixed numbers	Level 1 ( presently order common fractions)	Foundation <b>N1</b>
9. Find fractions of whole number quantities or measurements	Level 1 and level 2 ( dependent upon actual fraction)	Foundation <b>R3</b>
10. Read, write, order and compare decimals up to three decimal places	Level 2	Foundation <b>N1</b>
11. Add, subtract, multiply and divide decimals up to two decimal places	Add and subtract level 1 Multiply and divide level 2 (unless money)	Foundation <b>N2</b>
12. Approximate by rounding to a whole number or to one or two decimal places	Level 2	Foundation <b>N14</b>
13. Read, write, order and compare percentages in whole numbers	Level 1 and Level 2	N/A
14. Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof	Level 1 and Level 2	
15. Estimate answers to calculations using fractions and decimals	Level 1	

16. Recognise and calculate equivalences between common fractions, percentages and decimals	Level 1 and Level 2	
17. Work with simple ratio and direct proportions	Level 1	
<b>Level 1 – using common measures, shape and space</b>		
18. Calculate simple interest in multiples of 5% on amounts of money	Simple interest as a term not on present specification Percentage skill level 1 and level 2	N/A
19. Calculate discounts in multiples of 5% on amounts of money	Level 1 and Level 2	N/A
20. Convert between units of length, weight, capacity, money and time, in the same system	Level 1	Foundation <b>G14</b>
21. Recognise and make use of simple scales on maps and drawings	Level 1	Foundation <b>G15</b>
22. Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles	Level 1	Foundation <b>G14/G17</b>
23. Calculate the volumes of cubes and cuboids	Level 2	Foundation <b>G16</b>
24. Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles	Level 1, Entry Level 3	Foundation <b>G7</b>
	Knowledge, not in present specification	
25. Interpret plans, elevations and nets of simple 3-D shapes	Level 2	Foundation <b>G13</b>
26. Use angles when describing position and direction, and measure angles in degrees	Not in present specification Level 1	Foundation <b>G15</b>
<b>Level 1 – handling information and data</b>		
27. Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs	Level 1 Level 2 (non simple pie charts)	Foundation <b>S2</b>
28. Group discrete data and represent grouped data graphically	Level 2	Foundation <b>S4</b>
29. Find the mean and range of a set of quantities	Level 1 (discrete data)	Foundation <b>S4</b>
30. Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events	Level 1	Foundation <b>P3</b>
31. Use equally likely outcomes to find the probabilities of simple events and express them as fractions	Level 2	Foundation <b>P3</b>

## Level 2

DfE Subject content Functional Skills: Mathematics (Feb 2018)	Place in current Edexcel Functional Skills Mathematics 2010 Specifications	Place in Pearson Edexcel GCSE (9-1) in Mathematics Specification
<b>Level 2 – using numbers and the number system – whole numbers, fractions, decimals and percentages</b>		
1. Read, write, order and compare positive and negative numbers of any size	Level 2	Foundation <b>N1</b>
2. Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation	Level 2 ( presently numbers of any size)	Both tiers <b>N2/N14</b>
3. Evaluate expressions and make substitutions in given formulae in words and symbols	Level 2	Both tiers <b>A2</b>
4. Identify and know the equivalence between fractions, decimals and percentages	Level 2	Foundation <b>N10/R9</b>
5. Work out percentages of amounts and express one amount as a percentage of another	Level 2	Foundation <b>N12/R9</b>
6. Calculate percentage change (any size increase and decrease), and original value after percentage change	Level 2 for any size increase and decrease), and not present specification for original value after percentage change	Both tiers <b>R9</b>
7. Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers	Level 2 (Partial)	Both tiers <b>N2</b>
8. Express one number as a fraction of another	Level 2	Foundation <b>R3</b>
9. Order, approximate and compare decimals	Level 2	Foundation <b>N1</b>
10. Add, subtract, multiply and divide decimals up to three decimal places	Level 2 ( up to 2 decimal places presently)	Underlying skill
11. Understand and calculate using ratios, direct proportion and inverse proportion	Level 2 ( presently says simple direct proportion and inverse proportion)	Both tiers <b>R4/R5/R10</b>
12. Follow the order of precedence of operators, including indices	BIDMAS throughout. (Indices beyond a cubic, not presently used)	BIDMAS throughout
<b>Level 2 – measures, shape and space</b>		
13. Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting	Level 2 (Partial, compound interest not present specification)	Both tiers <b>R11</b>



14. Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph	Level 2	Both tiers <b>R1</b>
15. Calculate using compound measures including speed, density and rates of pay	Level 2	Both tiers <b>R11</b>
	(Partial, density not present specification)	
16. Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)	Level 2 (Partial)	Both tiers <b>G14/G16/G17</b>
17. Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)	Level 2 (Partial, note level 1 new requirement )	Both tiers <b>G14/G16</b>
18. Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements	Level 2	Both tiers <b>R2</b>
19. Use coordinates in 2-D, positive and negative, to specify the positions of points	Not present specification	Both tiers <b>A8</b>
20. Understand and use common 2-D representations of 3-D objects	Level 2	Foundation <b>G13</b>
21. Draw 3-D shapes to include plans and elevations	Level 2	Both tiers <b>G13</b>
22. Calculate values of angles and/or coordinates with 2-D and 3-D shapes	Not present specification (Angles required in pie charts)	Both tiers <b>G1/G6</b>
<b>Level 2 – handling information and data</b>		
23. Calculate the median and mode of a set of quantities	Level 2	Both tiers <b>S4</b>
24. Estimate the mean of a grouped frequency distribution from discrete data	Not present specification	Both tiers <b>S4</b>
25. Use the mean, median, mode and range to compare two sets of data	Level 2	Both tiers <b>S4</b>
26. Work out the probability of combined events including the use of diagrams and tables, including two-way tables	Not present specification	Both tiers <b>P7</b>
27. Express probabilities as fractions, decimals and percentages	Level 2	Both tiers <b>P3</b>
28. Draw and interpret scatter diagrams and recognise positive and negative correlation	Level 2	Both tiers <b>S6</b>