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## About CENTURY

CENTURY is a learning platform that uses artificial intelligence to personalise learning for every learner. Our team of experienced teachers have created all of our content for English, maths, science, geography and physical education from years 2 to 11, as well as functional skills content for post-16 learners. All courses are aligned to the national curriculum and national standards.Learning materials and questions for primary, secondary and post-16 learnersTailored to each learner's skills and knowledgePowered by the world's leading
adaptive learning platformWeb-based learning for tablets, laptops and desktops


## How does CENTURY work?

## Diagnostics

Learners begin by completing diagnostics that quickly identify knowledge gaps and misconceptions, and help CENTURY recommend the best learning materials for each individual learner.


## Recommended Path

This constantly adapting personalised pathway contains micro-lessons designed to address gaps in knowledge, provide stretch and challenge and promote long-term memory retention.

## Leadership Dashboard

Senior and middle leaders get an overview of performance and engagement on a subject, class and learner level.


## Achievements

Learners get rewarded with badges and streaks for completing micro-lessons or for using CENTURY over a certain period of time to increase their motivation and engagement.


## Automated Marking

Teachers can view data in real time, to help quickly identify which learners require additional support or further stretch.


## Learner Dashboard \& Guardian Portal

Learners can identify their strengths and areas for improvement. Parents and guardians can monitor their learner's progress, completed work, and see work set.

## Course List

## FE Mathematics

The FE GCSE courses are adapted from the secondary mathematics courses, with resitting students in mind. The courses have specific calculator and non-calculator diagnostics which are designed to quickly identify a learner's strengths and weaknesses.

The Functional Skills courses cover the mathematical knowledge and skills required for the Functional Skills qualifications, mapped to the national requirements outlined by the DfE in 'Subject content functional skills: mathematics'.

## GCSE

$\rightarrow$ FE - Mathematics GCSE (F) Diagnostics 10 Strands 52 Nuggets 675 View Course Content
$\rightarrow$ FE - Mathematics GCSE (H) Diagnostics 25 Strands 64 Nuggets 961 View Course Content


Each plant potis 10 cm wide.


## Functional Skills

Entry 1,2 \& 3
$\rightarrow$ FE - Mathematics
Functional Skills (Entry 1)
Diagnostics 3 Strands 4 Nuggets 33
View Course Content
$\rightarrow$ FE - Mathematics Functional Skills (Entry 2)
Diagnostics 2 Strands $4 \quad$ Nuggets 72
View Course Content
$\rightarrow$ FE - Mathematics
Functional Skills (Entry 3)
Diagnostics 3 Strands 4 Nuggets 75
View Course Content

Level 1 \& 2
$\rightarrow$ FE - Mathematics Functional Skills (Level 1) Diagnostics 2 Strands 18 Nuggets 154

View Course Content
$\rightarrow$ FE - Mathematics Functional Skills (Level 2) Diagnostics 3 Strands $18 \quad$ Nuggets 285 View Course Content

Courses suitable for all GCSE specifications
Edexcel: 1MA1 (QAN: 601/4700/3) AQA: 8300 (QAN: 601/4608/4)
OCR: J560 (QAN: 601/4606/0) Eduqas: C300P (QAN: 601/5503/6)

## Course Content FE - Mathematics GCSE: Foundation \& Higher

## Diagnostics 7 Strands 64 Nuggets 961

These courses cover all the content required for those in post-16 education targeting the Foundation or Higher GCSEs. They are also suitable for KS4 students who are sitting the GCSE exam in the current academic year.

## Strands

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course

| (F) Foundation Only (H) Higher Only |  |  |
| :---: | :---: | :---: |
| Strand | Nuggets | Course |
| Diagnostics | 3 |  |
| Higher Diagnostics | 4 | (H) |
| Simple Arithmetic | 14 |  |
| Understanding Number | 13 |  |
| Four Operations | 19 |  |
| Working with Fractions | 41 |  |
| Factors, Multiples and Primes | 20 |  |
| Working with Decimals | 14 |  |
| Introduction to Percentages (NC) | 15 |  |
| Fractions, Decimals and Percentages | 19 |  |
| $\leftarrow \text { Back to Curriculum Overview } \quad \begin{aligned} & \text { FE Math } \\ & \mathrm{FE}-\mathrm{Ma} \end{aligned}$ | ng |  |


| Strand | Nuggets | Course |
| :---: | :---: | :---: |
| Recurring Decimals | 8 | (H) |
| Rounding | 24 |  |
| Percentages Non-Calculator | 6 |  |
| Percentages Calculator | 19 |  |
| Powers and Roots | 7 |  |
| Surds | 16 | (H) |
| Indices | 24 |  |
| Standard Form | 10 |  |
| Ratio | 22 |  |
| Ratio and Proportion | 16 |  |
| Introduction to Algebra | 18 |  |
| Expanding and Factorising | 25 |  |
| Solving Linear Equations | 33 |  |
| Solving Quadratic Equations | 14 |  |
| Completing the Square | 9 | (H) |
| Algebraic Fractions | 13 | (H) |
| Formulae | 11 |  |
| Algebraic Proof | 4 |  |
| Functions | 17 |  |
| Sequences | 19 |  |
| Straight Line Graphs | 26 |  |
| Quadratic and Other Graphs | 36 |  |
| Inequalities | 21 |  |


| Strand | Nuggets | Course |
| :---: | :---: | :---: |
| Introduction to Geometry | 16 |  |
| Angles | 12 |  |
| Angles in Polygons | 11 |  |
| 2D Shapes | 7 |  |
| Perimeter | 6 |  |
| Area | 9 |  |
| Circles | 19 |  |
| 3D Shapes | 4 |  |
| Volume | 18 |  |
| Surface Area | 9 |  |
| Measure | 22 |  |
| Time and Money | 12 |  |
| Compound Measure | 25 |  |
| Scale Drawings and Bearings | 10 |  |
| Transformations | 24 |  |
| Circle Theorems | 12 | (H) |
| Vectors | 13 |  |
| Construction and Loci | 10 |  |
| Similarity | 10 |  |
| Pythagoras | 7 |  |
| Right-Angled Trigonometry | 8 |  |
| Advanced Trigonometry | 18 | (H) |
| 3D Trigonometry | 5 | (H) |


| Strand | Nuggets | Course |
| :--- | :---: | :---: |
| Probability | 28 |  |
| Sets and Venn Diagrams | 20 |  |
| Collecting Data | 8 |  |
| Analysing Data | 21 |  |
| Displaying Data | 18 |  |
| Cumulative Frequency and Box Plots | 14 | $\mathbb{H}$ |
| Histograms | 12 | $\mathbb{H}$ |
| Topic Diagnostics | 10 |  |
| Higher Topic Diagnostics | 11 | $\mathbb{H}$ |
| Topic Diagnostics: Number | 29 |  |
| Topic Diagnostics: Ratio and Proportion | 6 |  |
| Topic Diagnostics: Algebra | 23 |  |
| Topic Diagnostics: Graphs | 10 |  |
| Topic Diagnostics: Geometry | 28 |  |
| Topic Diagnostics: Measures | 7 |  |
| Topic Diagnostics: Probability | 6 |  |
| Topic Diagnostics: Statistics | 7 |  |
|  |  |  |

CENTURY

## Nuggets

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

| (F) Foundation Only |  | (H) Higher Only |  |
| :---: | :---: | :---: | :---: |
| Strand | Code | Nugget Name | Course |
| Diagnostics |  |  |  |
|  | MFE0.07 | Diagnostic: GCSE | (F) |
|  | MFE0.01 | Diagnostic: Non-calculator | (F) |
|  | MFE0.02 | Diagnostic: Calculator | (F) |
|  | MFE0.03 | Diagnostic: Non-calculator | (H) |
|  | MFE0.04 | Diagnostic: Calculator | (H) |
|  | MFE0.05 | Diagnostic (Aiming Higher): Non-calculator | (H) |
|  | MFE0.06 | Diagnostic (Aiming Higher): Calculator | (H) |
| Number |  |  |  |
|  | MF1.01 | Addition |  |
|  | MF1.02 | Subtraction |  |
|  | MF1.03 | Addition and Subtraction |  |
|  | MF1.04 | Times Tables: 2,5 and 10 |  |
|  | MF1.05 | Times Tables: 3 and 4 |  |
|  | MF1.06 | Times Tables: 6 and 7 |  |
|  | MF1.07 | Times Tables: 8 and 9 |  |
|  | MF1.08 | Times Tables: 11 and 12 |  |
|  | MF1.09 | Commutative Law |  |
| $\leftarrow$ Back to Curriculum Overview <br> FE Mathematics Co FE - Mathematics |  |  | Higher |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MF1.10 | Associative Law |  |
|  | MF1.11 | Division: 1, 2, 3, 4, 5 and 10 |  |
|  | MF1.12 | Division: 6, 7, 8, 9, 11 and 12 |  |
|  | MF1.13 | Division: Mixed |  |
|  | MF1.14 | Distributive Law |  |
|  | MF2.01 | Integer Place Value |  |
|  | MF2.02 | Mathematical Symbols |  |
|  | MF2.14 | Negative Numbers |  |
|  | MF2.04 | Symmetrical Subtraction |  |
|  | MF2.05 | Adding Negatives |  |
|  | MF2.06 | Subtracting Negatives |  |
|  | MF2.15 | Negatives and Positives |  |
|  | MF2.08 | Ordering Integers |  |
|  | MF2.09 | Ordering Decimals |  |
|  | MF2.10 | Ordering Negatives |  |
|  | MF2.11 | Multiplying by Powers of Ten |  |
|  | MF2.12 | Dividing by Powers of Ten |  |
|  | MF2.13 | Rounding to the nearest 10, 100 and 1000 |  |
|  | MF3. 01 | Column Addition |  |
|  | MF3.02 | Column Subtraction |  |
|  | MF3.03 | Addition and Subtraction: Worded Questions |  |
|  | MF3.04 | Multiplying Negatives |  |
|  | MF3.05 | Dividing Negatives |  |



| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF4.27 | Multiplying with Whole Numbers and Fractions |  |  | MF5.12 | HCF Using Prime Factorisation: Venn Diagrams |  |
|  | MF4.28 | Dividing with Whole Numbers and Fractions |  |  | MF5.13 | HCF Using Prime Factorisation: Product of Prime Factors |  |
|  | MF4.39 | Fraction of Amounts: Modelling |  |  | MF5.14 | LCM Using Prime Factorisation: Venn Diagrams |  |
|  | MF4.29 | Fraction of Amounts: Non-Calculator |  |  | MF5.15 | LCM Using Prime Factorisation: Product of Prime Factors |  |
|  | MF4.30 | Fraction of Amounts: Calculator |  |  | MF5.16 | HCF and LCM with Prime Factorisation |  |
|  | MF4.31 | Increasing and Decreasing by Fractions |  |  | MH5.17 | HCF and LCM of 3 Numbers | $(H)$ |
|  | MF4.40 | Fraction of Amounts: Modelling Finding the Whole |  |  | MH5.18 | Solving Problems with HCF and LCM 1 | (H) |
|  | MF4.32 | Reverse Fractions |  |  | MH5.19 | Solving Problems with HCF and LCM 2 | (H) |
|  | MF4.33 | Reverse Fractions: Worded Questions |  |  | MH5.20 | Solving Problems with HCF and LCM 3: Reverse | $(H)$ |
|  | MF4.34 | Estimating Products of Fractions |  |  | MF6. 01 | Decimal Place Value |  |
|  | MF4.35 | Dividing Fractions (Bar Model) |  |  | MF6.02 | Adding Decimals 1: Calculations |  |
|  | MH4.34 | Applied Fractions | $(H)$ |  | MF6.03 | Adding Decimals 2: Worded Problems |  |
| Factors, Multiples and Primes | MF5.01 | Odds and Evens with Addition and Subtraction |  |  | MF6.04 | Subtracting Decimals 1: Calculations |  |
|  | MF5.02 | Odds and Evens with Multiplication |  |  | MF6.05 | Subtracting Decimals 2: Worded Problems |  |
|  | MF5.03 | Primes |  |  | MF6.06 | Multiplying Decimals 1 |  |
|  | MF5.04 | Multiples |  |  | MF6.07 | Multiplying Decimals 2 |  |
|  | MF5.05 | Factors |  |  | MF6.08 | Multiplying Decimals: Worded Questions |  |
|  | MF5.06 | Multiples and Factors |  |  | MF6.09 | Dividing Decimals |  |
|  | MF5.07 | Lowest Common Multiple - Listing Technique |  |  | MF6.10 | Dividing Decimals by Decimals |  |
|  | MF5.08 | Highest Common Factor - Listing Technique |  |  | MF6.11 | Dividing by Large Numbers |  |
|  | MF5.09 | Prime Factorisation 1: Factor Tree Given |  |  | MF6.12 | Manipulating Decimal Calculations with Multiplication |  |
|  | MF5.10 | Prime Factorisation 2 |  |  | MF6.13 | Manipulating Decimal Calculations with Division |  |
|  | MF5.11 | Uses of Prime Factorisation |  |  | MF6.14 | Multiplying Decimals with Napier's Bones |  |


| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF7.01 | Understanding Percentages |  |  | MF8.08 | Percentage to Fractions |  |
|  | MF7.02 | Finding 50\% |  |  | MF8.09 | Decimals to Fractions |  |
|  | MF7.03 | Finding 25\% |  |  | MF8.10 | Fractions to Decimals (Calculator) |  |
|  | MF7.04 | Finding 10\% |  |  | MF8.11 | Fractions to Percentages (Calculator) |  |
|  | MF7.05 | Finding 5\% |  |  | MF8.12 | Percentage to Fractions (Calculator) |  |
|  | MF7.06 | Finding 1\% |  |  | MF8.13 | Decimals to Fractions (Calculator) |  |
|  | MF7.07 | Finding Multiples of Tens in Percentages |  |  | MF8.14 | Ordering Fractions, Decimals and Percentages 1: Unit Fractions (Non-Calculator) |  |
|  | MF7.15 | Percentages of Amounts: Modelling |  |  |  | Ordering Fractions, Decimals and Percentages 2: |  |
|  | MF7.08 | Finding Percentages of Amounts 1 |  |  | MF8.15 | Non-Unit Fractions (Non-Calculator) |  |
|  | MF7.09 | Finding Percentages of Amounts 2 |  |  | MF8.16 | Ordering Fractions, Decimals and Percentages 3: Numbers Less than 1 (Calculator) |  |
|  | MF7.10 | Finding Percentages of Amounts 3 |  |  | MF8.17 | Ordering Fractions, Decimals and Percentages 4: Numbers More than 1 (Calculator) |  |
|  | MF7.11 | Comparing Percentages 1: Multiples of 5\% |  |  | MF8.18 | Converting Percentage (Less than 1\%) |  |
|  | MF7.12 | Comparing Percentages 2 |  |  | MF8.19 | Converting Percentage (Greater than 100\%) |  |
|  | MF7.13 | Finding Decimal Percentages |  |  | MH51.01 | Fractions to Recurring Decimals 1: Special Cases | (H) |
|  | MF7. 14 | Estimate with Percentages |  |  |  |  |  |
|  | MF8.01 | Introduction to Fractions, Decimals and Percentages |  |  | MH51.02 | Fractions to Recurring Decimals 2: Long Division |  |
|  | MF8. 02 | Converting Fractions to Denominator 100 |  |  | MH51.03 | Fractions to Recurring Decimals 3: Long Division (Numbers > 1) | (H) |
|  | MF8.03 | Fractions to Percentage |  |  | MH51.04 | Recurring Decimals 1: 1-2 Digits | (H) |
|  | MF8.04 | Decimals to Percentage |  |  | MH51.05 | Recurring Decimals 2: 2-4 Digits | (H) |
|  | MF8.05 | Percentage to Decimals |  |  | MH51.06 | Recurring Decimals 3: Non-Recurring and Recurring Digits | (H) |
|  | MF8.06 | Fractions to Decimals 1: Equivalent Fractions |  |  | MH51.07 | Recurring Decimals 4: Special Cases | (H) |
|  | MF8.07 | Fractions to Decimals 2: Division |  |  | MH51.08 | Recurring Decimals 5: Calculations | (H) |
| $\leftarrow$ Back to Curriculum Overview <br> FE Mathematics Course Mapping FE - Mathematics GCSE: Foundation \& Higher |  |  |  |  |  | CENTL | 10 |


| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 을 } \\ & \text { 읃 } \\ & \text { 己。 } \end{aligned}$ | MF9.01 | Rounding to the Nearest Whole Number |  |  | MH9.22 | Bounds 10: Suitable Degrees of Accuracy | (H) |
|  | MF9.02 | Rounding to 1 Decimal Place |  |  | MH9.23 | Bounds 11: Discrete Variables | $(H)$ |
|  | MF9.03 | Rounding to 2 Decimal Places |  |  | MH9.24 | Truncation | $(H)$ |
|  | MF9.04 | Rounding to Mixed Decimal Places |  |  | MF10.06 | Percentage Increase and Decrease: Modelling |  |
|  | MF9.05 | Rounding to 1 Significant Figure |  |  | MF10.01 | Percentage Increase |  |
|  | MF9.06 | Rounding to 2 Significant Figures |  |  | MF10.02 | Percentage Decrease |  |
|  | MF9.07 | Rounding to 3 Significant Figures |  |  | MF10.03 | Percentage Increase and Decrease |  |
|  | MF9.08 | Rounding to Mixed Significant Figures |  |  | MF10.04 | Finding Percentages greater than 100 |  |
|  | MF9.09 | Mixed Rounding |  |  | MF10.05 | Simple Interest |  |
|  | MF9.10 | Rounding to Appropriate Degrees of Accuracy |  |  | MF11.01 | Finding Percentages 1: Integer Percentages < 100\% (Calculator) |  |
|  | MF9.11 | Introduction to Estimation |  |  | MF11.02 | Finding Percentages 2: > 100\% or Non-Integer Percentages (Calculator) |  |
|  | MF9.12 | Estimation |  |  | MF11.03 | Percentage Increase and Decrease (Calculator) |  |
|  | MF9.13 | Bounds 1: Introduction |  |  | MF11.04 | Percentage Change |  |
|  | MF9.14 | Bounds 2: Simple Calculation |  |  | MF11.05 | Repeated Percentage Increase and Decrease (Calculator) |  |
|  | MF9.15 | Bounds 3: Intervals |  |  | MF11.06 | Simple Interest (Calculator) |  |
|  | MH9.16 | Bounds 4: Addition | $(H)$ |  | MF11.07 | Compound Interest (Calculator) |  |
|  | MH9.17 | Bounds 5: Subtraction | (H) |  | MF11.08 | Depreciation (Calculator) |  |
|  | MH9.18 | Bounds 6: Multiplication | $(H)$ |  | MF11.09 | Compound Interest and Depreciation (Calculator) |  |
|  | MH9.19 | Bounds 7: Division | (H) |  | MF11.10 | Simple and Compound Interest (Calculator) |  |
|  | MH9.20 | Bounds 8: Mixed Operations | (H) |  | MF11.18 | Reverse Percentages Introduction: Modelling |  |
|  | MH9.21 | Bounds 9: Formulae | (H) |  | MF11.19 | Reverse Percentages: Modelling |  |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MF11.11 | Reverse Percentage |  |
|  | MF11.12 | Percentage Error |  |
|  | MF11.13 | Express One Amount as a Percentage of Another |  |
|  | MF11.14 | Percentage Problems |  |
|  | MH11.14 | Exponential Growth | (H) |
|  | MH11.15 | Exponential Decay | (H) |
|  | MH11.16 | Exponential Growth and Decay | (H) |
|  | MF12.01 | Squares |  |
|  | MF12.02 | Cubes |  |
|  | MF12.03 | Squaring and Cubing Negatives |  |
|  | MF12.04 | Powers |  |
|  | MF12.05 | Roots of Squares and Cubes |  |
|  | MF12.06 | Roots |  |
|  | MH12.07 | Estimating Powers and Roots | (H) |
| $\begin{aligned} & \text { n } \\ & \stackrel{n}{3} \\ & \text { n } \end{aligned}$ | MH52.01 | Surds: Introduction | (H) |
|  | MH52.02 | Surds: Multiplication and Division | (H) |
|  | MH52.03 | Surds: Simplifying 1 | (H) |
|  | MH52.04 | Surds: Simplifying 2 (Products of Surds) | (H) |
|  | MH52.05 | Surds: Simplifying 3 (Dividing Surds) | (H) |
|  | MH52.06 | Surds: Simplifying 4 (Sum and Difference) | (H) |
|  | MH52.07 | Surds: Expanding 1 (Single Bracket) | (H) |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { n } \\ & \text { N } \\ & \text { ज } \end{aligned}$ | MH52.08 | Surds: Expanding 2 (Sum/Difference of Single Brackets) | (H) |
|  | MH52.09 | Surds: Expanding 3 (Double Brackets) | (H) |
|  | MH52.10 | Surds: Expanding 4 <br> (Double Brackets, Surds with Coefficients) | $(H)$ |
|  | MH52.11 | Surds: Expanding 5 (Difference of Two Squares) | $(H)$ |
|  | MH52.12 | Surds: Rationalising 1 (Monomial Denominator) | $(H)$ |
|  | MH52.13 | Surds: Rationalising 2 (Binomial Denominator) | (H) |
|  | MH52.14 | Surds: Rationalising 3 <br> (Sum/Difference with Binomial Denominators) | $(H)$ |
|  | MH52.15 | Surds: Rationalising 4 <br> (Sum/Difference with Binomial Denominators) | (H) |
|  | MH52.16 | Surds: Rationalising 5 <br> (Surd within Fraction within Denominator) | (H) |
| $\begin{aligned} & \text { U } \\ & . \stackrel{U}{0} \\ & \underline{\underline{I}} \end{aligned}$ | MF13.01 | Powers of 0 and 1 |  |
|  | MF13.02 | Raising a Fraction to a Power |  |
|  | MF13.03 | Multiplying Indices |  |
|  | MF13.04 | Dividing Indices |  |
|  | MF13.05 | Power of a Power |  |
|  | MF13.06 | Negative Indices |  |
|  | MF13.07 | Combination of Indices |  |
|  | MH13.08 | Fractional Indices 1: Square and Cube Root | (H) |
|  | MH13.09 | Fractional Indices 2: Non-Unit Fraction | (H) |
|  | MH13.10 | Fractional Indices 3: Negative Unit Fractions | (H) |
|  | MH13.11 | Fractional Indices 4: Negative Non-Unit Fractions | (H) |
|  |  |  | 12 |




[^0]FE Mathematics Course Mapping
FE - Mathematics GCSE: Foundation \& Higher

| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF18.25 | Expanding Single Brackets: Introduction |  |  | MH18.23 | Factorising Quadratics 6: $(a x \pm b)(c x \pm d)$ | (H) |
|  | MF18.01 | Expanding Single Brackets 1: $\mathrm{a}(\mathrm{x} \pm \mathrm{b})$ |  |  | MH18.24 | Factorising Quadratics 7: $(a x \pm b)(c x \pm d)$ | (H) |
|  | MF18.02 | Expanding Single Brackets $2: \pm \mathrm{a}(\mathrm{x} \pm \mathrm{b})$ |  |  | MF18.17 | The Difference of Two Squares |  |
|  | MF18.03 | Expanding Single Brackets $3: \pm \mathrm{a}( \pm \mathrm{bx} \pm \mathrm{cy})$ |  |  | MF19.30 | Solving Equations: One Step Modelling (+ -) |  |
|  | MF18.04 | Expanding Single Brackets 4: $\pm \mathrm{x}( \pm \mathrm{y} \pm \mathrm{a})$ |  |  |  |  |  |
|  | MF18.05 | Expanding Single Brackets 5: Mixed |  |  | MF19.01 | Solving Equations: One Step (+ -) |  |
|  | MF18.06 | Expanding and Simplifying |  |  | MF19.31 | Solving Equations: One Step Modelling ( $\times \div$ ) |  |
|  | MF18.07 | Factorising into a Single Bracket 1: $\mathrm{x} \pm \mathrm{a}$ or $\mathrm{a} \pm \mathrm{x}$ |  |  | MF19.02 | Solving Equations: One Step (×) |  |
|  | MF18.08 | Factorising into a Single Bracket 2: $\mathrm{ax} \pm \mathrm{bx}$ |  |  | MF19.03 | Solving Equations: One Step ( $\div$ |  |
|  | MF18.09 | Factorising into a Single Bracket 3: $\operatorname{axy}\left(\mathrm{bx} \mathrm{x}^{2} \pm \mathrm{cx} \pm \mathrm{d}\right)$ |  |  | MF19.04 | Solving Equations: One Step ( + - $\times$ ) |  |
|  | MF18.10 | Expanding Double Brackets 1: $(x \pm a)(x \pm b)$ |  |  | MF19.32 | Solving Equations: Two Steps Modelling (x) |  |
|  | MF18.11 | Expanding Double Brackets 2: $(a x \pm b)(c x \pm d)$ |  |  | MF19.33 | Solving Equations: Two Steps Modelling ( $\div$ ) |  |
|  | MF18.12 | Expanding Double Brackets 3: $(x \pm a)^{2}$ |  |  |  |  |  |
|  | MF18.13 | Expanding Double Brackets 4: $\mathrm{a}(\mathrm{bx} \pm \mathrm{c})(\mathrm{dx} \pm \mathrm{e})$ |  |  | MF19.05 | Solving Equations: Two Steps Modelling ( $\times \div$ ) |  |
|  | MF18.14 | Expanding Double Brackets 5: $\mathrm{a}(\mathrm{bx} \pm \mathrm{c})^{2}$ |  |  | MF19.06 | Solving Equations: Two Steps $\mathrm{ax}+\mathrm{b}=\mathrm{c}$ |  |
|  | MH18.18 | Expanding Double Brackets 6: $(\mathrm{ax} \pm \mathrm{b})(\mathrm{cy} \pm \mathrm{d})$ | (H) |  | MF19.07 | Solving Equations: Two Steps $\mathrm{ax}-\mathrm{b}=\mathrm{c}$ |  |
|  | MH18.19 | Expanding More Brackets | (H) |  | MF19.08 | Solving Equations: Two Steps (x/a) $\pm \mathrm{b}=\mathrm{c}$ |  |
|  | MF18.15 | Factorising Quadratics 1: $(x+a)(x+b)$ |  |  | MF19.09 | Solving Equations: Two Steps ( $x \pm a$ )/b $=c$ |  |
|  | MF18.16 | Factorising Quadratics 2: $(x \pm a)(x \pm b)$ |  |  | MF19.10 | Solving Equations: <br> Two Steps (Unknown as Denominator) |  |
|  | MH18.20 | Factorising Quadratics 3: $(a x \pm b)(x \pm c)$ | (H) |  |  |  |  |
|  | MH18.21 | Factorising Quadratics 4: $(a x \pm b)(x \pm c)$ | (H) |  | MF19.11 | Solving Equations: Two Steps (Negative Unknown) |  |
|  | MH18.22 | Factorising Quadratics 5: $(a x \pm b)(x \pm c)$ | (H) |  | MF19.12 | Solving Equations: Two Steps (Mixed Exercise) |  |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MF19.13 | Solving Equations: Three Steps (Unknown on One Side) |  |
|  | MF19.14 | Solving Equations: Three Steps (Including Brackets) |  |
|  | MF19.15 | Solving Equations: <br> Three Steps (Unknown on Both Sides) |  |
|  | MF19.16 | Solving Equations: Four Steps (Including Expanding) |  |
|  | MF19.17 | Solving Equations: Four Steps (Including Fractions) |  |
|  | MF19.18 | Generating Equations from Words |  |
|  | MF19.19 | Generating Equations from Diagrams |  |
|  | MF19.20 | Simultaneous Equations: Introduction |  |
|  | MF19.21 | Simultaneous Equations 1 |  |
|  | MF19.22 | Simultaneous Equations 2: Scale One Equation |  |
|  | MF19.23 | Simultaneous Equations 3: Scale Both Equations |  |
|  | MF19.24 | Simultaneous Equations 4: Rearranging |  |
|  | MF19.25 | Simultaneous Equations: Substitution |  |
|  | MH19.27 | Iteration 1: Find Solution Between | (H) |
|  | MH19.28 | Iteration 2: Rearrange Iterative Formula | (H) |
|  | MH19.29 | Iteration 3: Recursive Iteration | (H) |
|  | MF19.26 | Simultaneous Equations: Worded Questions |  |
|  | MF20.01 | Solving Quadratics 1: $\mathrm{x}^{2}+\mathrm{b}=0$ |  |
|  | MF20.02 | Solving Quadratics 2: $a x^{2}+b x=0$ |  |
|  | MF20.03 | Solving Quadratics 3: $\mathrm{x}^{2}+\mathrm{bx}+\mathrm{c}=0$ |  |
|  | MF20.04 | Solving Quadratics 4: $\mathrm{x}^{2}+\mathrm{bx}+\mathrm{c}=0$ (incl. Rearranging) |  |
|  | MH20.05 | The Discriminant | (H) |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MH20.06 | Quadratic Formula 1: Identify A, B and C | (H) |
|  | MH20.07 | Quadratic Formula 2: Applying the Formula | (H) |
|  | MH20.08 | Quadratic Formula 3: Applying the Formula | (H) |
|  | MH20.09 | Quadratic Formula 4: Give Answer in Form ( $p \pm \sqrt{ } \mathrm{q}) / \mathrm{r}$ | (H) |
|  | MH20.10 | Quadratic Formula 5: In Context | (H) |
|  | MH20.11 | Solving Quadratics 5: $a x^{2}+b x+c=0$ ( $a$ is Prime) | (H) |
|  | MH20.12 | Solving Quadratics 6: $a x^{2}+b x+c=0$ ( $a$ is Not Prime) | (H) |
|  | MH20.13 | Solving Quadratics 7: Challenge | (H) |
|  | MH20.14 | Quadratic Simultaneous Equations | (H) |
|  | MH53.01 | Completing the Square 1: $(x+q)^{2}+r$ | (H) |
|  | MH53.02 | Completing the Square 2: $(x+q / 2)^{2}+r$ | (H) |
|  | MH53.03 | Completing the Square 3: $p(x+q)^{2}+r$ | (H) |
|  | MH53.04 | Completing the Square 4: $-\mathrm{p}(\mathrm{x}+\mathrm{q} / 2)^{2}+\mathrm{r}$ | (H) |
|  | MH53.05 | Completing the Square to Solve Equations 1: $\mathrm{x}^{2}+\mathrm{bx}+\mathrm{c}$ | (H) |
|  | MH53.06 | Completing the Square to Solve Equations 2: $x^{2}+b x+c$ (Including Fractions) | (H) |
|  | MH53.07 | Completing the Square to Solve Equations 3: $\mathrm{ax}^{2}+\mathrm{bx}+\mathrm{c}$ | (H) |
|  | MH53.08 | Completing the Square to Solve Equations 4: Mixed Exercise | (H) |
|  | MH53.09 | Completing the Square: Turning Points | (H) |
|  | MH54.01 | Algebraic Fractions 1: Simplify (Monomial Factors) | (H) |
|  | MH54.02 | Algebraic Fractions 2: Simplify (Monomial Factors incl. Negatives) | (H) |
|  | MH54.03 | Algebraic Fractions 3: Simplify (Binomial Factors) | (H) |

[^1]FE Mathematics Course Mapping
FE - Mathematics GCSE: Foundation \& Higher

| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MH54.04 | Algebraic Fractions 4: Simplify (Binomial Factors) | $(H)$ |
|  | MH54.05 | Algebraic Fractions 5: Add and Subtract (Constant as Denominator) | $(H)$ |
|  | MH54.06 | Algebraic Fractions 6: Add and Subtract (Monomial as Denominator) | $(H)$ |
|  | MH54.07 | Algebraic Fractions 7: Add and Subtract (Binomial as Denominator) | $(H)$ |
|  | MH54.08 | Algebraic Fractions 8: Multiply | $(H)$ |
|  | MH54.09 | Algebraic Fractions 9: Multiply | (H) |
|  | MH54.10 | Algebraic Fractions 10: Factorise then Multiply | (H) |
|  | MH54.11 | Algebraic Fractions 11: Divide | (H) |
|  | MH54.12 | Algebraic Fractions 12: Solve | (H) |
|  | MH54.13 | Algebraic Fractions 13: Problem Solving | (H) |
| $\begin{aligned} & \text { © } \\ & \text { 苟 } \\ & \text { 티 } \\ & \text { L } \end{aligned}$ | MF21.01 | Generating Formulae |  |
|  | MF21.02 | Substituting into a Formula |  |
|  | MF21.03 | Using Kinematics |  |
|  | MF21.04 | Recalling and Using Formulae 1 |  |
|  | MH21.11 | Recalling and Using Formulae 2 | (H) |
|  | MF21.05 | Rearranging Formulae: One Step |  |
|  | MF21.06 | Rearranging Formulae: Two Step |  |
|  | MF21.07 | Rearranging Formulae: Negative Subject |  |
|  | MF21.08 | Rearranging Formulae: Unknown in Denominator |  |
|  | MF21.09 | Rearranging Formulae: With Powers |  |
|  | MF21.10 | Rearranging Formulae: Unknown on Both Sides |  |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MH55.01 | Introduction to Algebraic Proof | (H) |
|  | MH55.02 | Algebraic Proof 1: Complete the Proof | (H) |
|  | MH55.03 | Algebraic Proof 2 | (H) |
|  | MH55.04 | Algebraic Proof: Disproving by Example | (H) |
|  | MH56.01 | Functions: Key Concept | (H) |
|  | MH56.02 | Functions: Substitution 1 (Linear Functions) | (H) |
|  | MH56.03 | Functions: Substitution 2 (Quadratic Functions) | (H) |
|  | MH56.04 | Functions: Substitution 3 (Challenge) | (H) |
|  | MH56.05 | Functions: Solving | (H) |
|  | MH56.06 | Functions: Algebraic | (H) |
|  | MH56.07 | Composite Functions: Substitution 1 (2 Linear Functions) | (H) |
|  | MH56.08 | Composite Functions: <br> Substitution 2 (2 Non-Linear Functions) | (H) |
|  | MH56.09 | Composite Functions: Substitution 3 (3 Functions) | (H) |
|  | MH56.10 | Composite Functions: <br> Substitution 4 (Quadratic Functions) | (H) |
|  | MH56.11 | Composite Functions: Solving | (H) |
|  | MH56.12 | Composite Functions: Algebraic | (H) |
|  | MH56.13 | Inverse Functions 1: Linear | (H) |
|  | MH56.14 | Inverse Functions 2: Non-Linear | (H) |
|  | MH56.15 | Inverse Functions: Substitution | (H) |
|  | MH56.16 | Inverse Functions: Solving | (H) |
|  | MH56.17 | Composite and Inverse Functions | (H) |


| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF22.01 | Continuing Sequences |  |  | MF23.03 | Midpoint of a Line Segment |  |
|  | MF22.02 | Linear Sequences: Finding the Term-to-Term Rule |  |  | MH23.20 | Coordinates and Ratios | (H) |
|  | MF22.03 | Linear Sequences: Using the Term-to-Term Rule |  |  | MF23.04 | Horizontal and Vertical Graphs |  |
|  | MF22.04 | Linear Sequences with Diagrams 1: Term-to-Term Rule |  |  | MF23.05 | Other Important Linear Graphs |  |
|  | MF22.05 | Linear Sequences: Using the nth Term 1 (Substitute) |  |  | MF23.06 | Plotting Straight Line Graphs: 1st Quadrant |  |
|  | MF22.06 | Linear Sequences: Using the nth Term 2 (Solve) |  |  | MF23.07 | Plotting Straight Line Graphs: 4 Quadrants |  |
|  | MF22.07 | Linear Sequences: Finding the nth Term 1 (Increasing) |  |  | MF23.08 | Finding the Gradient of a Line Segment: Using the Graph |  |
|  | MF22.08 | Linear Sequences: Finding the nth Term 2 (Decreasing) |  |  | MF23.09 | Finding the Gradient of a Line Segment: |  |
|  | MF22.09 | Linear Sequences with Diagrams 2: nth Term |  |  | MF23.09 | Using the Formula |  |
|  | MF22.10 | Important Sequences: Squares, Cubes and Triangular Numbers |  |  | MF23.10 | Understanding $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ |  |
|  | MF22.11 | Important Sequences: Geometric |  |  | MF23.11 | Graphing $\mathrm{y}=\mathrm{mx}+\mathrm{c}(1)$ |  |
|  | MF22.12 | Important Sequences: Fibonacci |  |  | MF23.12 | Graphing $\mathrm{y}=\mathrm{mx}+\mathrm{c}(2)$ |  |
|  | MF22.13 | Quadratic Sequences: Using the nth Term |  |  | MF23.13 | Finding $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ from a Gradient and a Point |  |
|  | MH22.14 | Subscript Notation | (H) |  | MF23.14 | Finding $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ from Two Points |  |
| ${ }^{\square}$ | MH22.15 | Unusual Sequences | (H) |  | MF23.15 | Rearranging $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ |  |
| $\begin{aligned} & \text { प्0 } \\ & \frac{1}{\square} \end{aligned}$ | MH22.16 | Quadratic Sequences 1: $\mathrm{n}^{2}+\mathrm{c}$ | (H) |  | MF23.16 | Finding Parallel Lines |  |
| $\begin{aligned} & \dot{\delta} \\ & \stackrel{y}{c} \end{aligned}$ | MH22.17 | Quadratic Sequences 2: $\mathrm{an}^{2}+\mathrm{c}$ | (H) |  | MH23.21 | Finding Perpendicular Lines 1: Gradient | (H) |
|  | MH22.18 | Quadratic Sequences 3: $\mathrm{an}^{2}+\mathrm{bn}+\mathrm{c}$ | (H) |  | MH23.22 | Finding Perpendicular Lines 2: Equation | (H) |
|  | MH22.19 | Quadratic Sequences 4: $a^{2}+\mathrm{bn}+\mathrm{c}$ and $(a n+b)^{2}$ | (H) |  | MH23.23 | Finding Perpendicular Lines 3: Problem Solving | (H) |
|  | MF23.01 | Understanding Coordinates: 1st Quadrant |  |  | MH23.24 | Equation of a Tangent 1: Circle Given | (H) |
|  | MF23.02 | Understanding Coordinates: 4 Quadrants |  |  | MH23.25 | Equation of a Tangent 2: Mixed Exercise | (H) |
|  | MF23.26 | Coordinates and 2D Shapes |  |  | MF23.17 | Solving Using Straight Line Graphs |  |

[^2]| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF23.18 | Solving Simultaneous Equations Using Straight Line Graphs 1: Graphs Given |  | Quadratic and Other Graphs | MH24.23 | Plotting Exponential Graphs | (H) |
|  |  |  |  |  | MF24.09 | Recognising Key Graphs |  |
|  | MF23.19 | Solving Simultaneous Equations Using Straight Line Graphs 2: Graphs Not Given |  |  | MF24.10 | Approximate Solutions Using a Graph |  |
| $n$0000000000000000000 | MF24.01 | Plotting Simple Quadratic Graphs 1: $\mathrm{y}=a \mathrm{x}^{2}+\mathrm{c}$ |  |  | MH24.24 | Transforming Graphs: Translating Vertical | (H) |
|  | MF24.02 | Plotting Simple Quadratic Graphs 2: $\mathrm{y}=\mathrm{ax}+\mathrm{bx}+\mathrm{c}$ |  |  | MH24.25 | Transforming Graphs: Translating Horizontal | (H) |
|  | MF24.03 | Quadratic Graphs: Finding the y-intercept |  |  | MH24.26 | Transforming Graphs: Reflections | (H) |
|  | MF24.04 | Quadratic Graphs: Finding the Line of Symmetry |  |  | MH24.27 | Transforming Graphs: Stretching y-direction | (H) |
|  | MF24.05 | Quadratic Graphs: Finding the Turning Point |  |  | MH24.28 | Transforming Graphs: Stretching x-direction | (H) |
|  | MF24.06 | Quadratic Graphs: Finding the Roots |  |  | MH24.29 | Transforming Graphs: Mixed Translations | (H) |
|  | MH24.13 | Quadratic Graphs: Turning Point from Completing Square 1: $y=(x+q)^{2}+r$ Given | (H) |  | MH24.30 | Transforming Graphs: Mixed Stretches | (H) |
|  |  | Quadratic Graphs: Turning Point from Completing Square 2: $y=(x+q)^{2}+r$ Not Given | $(H)$ |  | MH24.31 | Transforming Graphs: Mixed | (H) |
|  | MH24.14 |  |  |  | MH24.21 | Transforming Graphs: Mixed (Trig Functions) | (H) |
|  | MH24.15 | Quadratic Graphs: Turning Point from Completing Square 3: $y= \pm p(x+q)^{2}+r$ Not Given | (H) |  | MH24.32 | Transforming Graphs: Combined 1 | (H) |
|  | MH24.16 | Estimating Gradients | (H) |  | MH24.33 | Transforming Graphs: Combined 2 | (H) |
| $n$0000020000000000000 | MH24.17 | Exponential Functions | (H) |  | MH24.34 | Areas under Graphs | (H) |
|  | MH24.18 | Trigonometric Functions: Sin Graph | (H) |  | MF24.11 | Real Life Graphs: Plotting |  |
|  | MH24.19 | Trigonometric Functions: Cos Graph | (H) |  | MF24.12 | Real Life Graphs: Interpreting |  |
|  | MH24.20 | Trigonometric Functions: Tan Graph | (H) |  | MH24.35 | Quadratic Simultaneous Equations Graphically | (H) |
|  | MH24.37 | Trigonometric Functions: Mixed | (H) |  | MH24.36 | Polynomial Simultaneous Equations Graphically |  |
|  | MH24.22 | Equations of Circles | (H) |  | MF25.01 | Representing Inequalities on a Number Line |  |
|  | MF24.07 | Plotting Other Polynomial Graphs |  |  | MF25.02 | Representing Two Sided Inequalities on a Number Line |  |
|  | MF24.08 | Plotting Reciprocal Graphs |  |  | MF25.03 | Interpreting Inequalities from a Number Line |  |

[^3]| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF25.04 | Interpreting Two Sided Inequalities from a Number Line |  |  | MF26.03 | Types of Angles 1: Diagrams |  |
|  | MH25.13 | Solving Quadratic Inequalities Graphically |  |  | MF26.04 | Types of Angles 2: Numbers |  |
|  | MF25.05 | Finding Integer Solutions to Inequalities |  |  | MF26.05 | Parallel and Perpendicular Lines |  |
|  | MF25.06 | Solving Inequalities: One Step |  |  | MF26.06 | Naming 2D Shapes |  |
|  | MF25.07 | Solving Inequalities: Negative Variable |  |  | MF26.07 | Types of Triangles 1: Diagrams |  |
|  | MF25.08 | Solving Inequalities: Two Step |  |  | MF26.08 | Types of Triangles 2: Words |  |
|  | MF25.09 | Solving Inequalities: One Step and Two Sided |  |  | MF26.09 | Types of Quadrilateral |  |
|  | MF25.10 | Solving Inequalities: Multi Step and Two Sided |  |  | MF26.10 | Naming 3D Shapes |  |
|  | MF25.11 | Solving Inequalities: <br> Finding Integer Solutions with Two Sides |  |  | MF26.11 | Measuring Angles 1: Angles < $180^{\circ}$ (horizontal) |  |
|  |  | Solving Inequalities: |  |  | MF26.12 | Measuring Angles 2: Angles < $180^{\circ}$ |  |
|  | MF25.12 | Expressing Solutions on a Number Line |  |  | MF26.13 | Measuring Angles 3: Angles > $180^{\circ}$ |  |
|  | MH25.14 | Solving Inequalities: Quadratics 1 |  |  | MF26.14 | Estimating Angles |  |
|  | MH25.15 | Solving Inequalities: Quadratics 2 (Rearranging) |  |  | MF26.15 | Drawing Angles |  |
|  | MH25.16 | Solving Inequalities: Quadratics 3 (Factorising) |  |  | MF26.16 | Using a Ruler |  |
|  | MH25.17 | Solving Multiple Linear Inequalities |  | $\begin{aligned} & \frac{0}{6} \\ & \frac{5}{4} \end{aligned}$ | MF27.01 | Straight Line Angles 1: Multiples of $5^{\circ}$ |  |
|  | MH25.18 | Regions 1: One Vertical/Horizontal Line |  |  | MF27.02 | Straight Line Angles 2 |  |
|  | MH25.19 | Regions 2: One Line of Form $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ |  |  | MF27.03 | Straight Line Angles with Algebra |  |
|  | MH25.20 | Regions 3: Multiple Vertical/Horizontal Lines |  |  | MF27.04 | Angles Around a Point 1: Multiples of $5^{\circ}$ |  |
|  | MH25.21 | Regions 4: Multiple Lines of Form $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ |  |  | MF27.05 | Angles Around a Point 2 |  |
| Geometry |  |  |  |  | MF27.06 | Angles Around a Point with Algebra |  |
|  | MF26.01 | Key Terms in 2D Geometry |  |  | MF27.07 | Vertically Opposite Angles |  |
|  |  |  |  |  | MF27.08 | Alternate Angles |  |
|  | MF26.02 | Key Terms in 3D Geometry |  |  | MF27.09 | Corresponding Angles |  |



| Strand | Code | Nugget Name Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF32.08 | Area of a Circle: From Diameter | $\begin{aligned} & 0 \\ & \stackrel{0}{3} \\ & \frac{1}{0} \end{aligned}$ | MF34.07 | Volume of Cylinders |  |
|  | MF32.09 | Area of a Circle |  | MF34.08 | Volume of Cylinders with a Missing Value |  |
|  | MF32.10 | Using the Area of a Circle to find the Radius or Diameter |  | MF34.09 | Volume of Part Cylinders |  |
|  | MF32.11 | Areas of Part Circles |  | MF34.10 | Volume of a Sphere |  |
|  | MF32.12 | Areas of Composite Shapes with Part Circles |  | MF34.11 | Volume of a Sphere with the Radius Missing |  |
|  | MF32.13 | Arc Length 1: Fractions |  | MF34.12 | Volume of a Cone |  |
|  | MF32.14 | Arc Length 2: Degrees |  | MF34.13 | Volume of a Cone with the Radius Missing |  |
|  | MH32.17 | Arc Length 3: Reverse (H) |  | MF34.14 | Volume of a Hemisphere |  |
|  | MF32.15 | Area of a Sector 1 |  | MF34.15 | Volume of Pyramids |  |
|  | MH32.18 | Area of a Sector 2: Reverse (H) |  |  |  |  |
|  | MF3216 | Area and Perimeter of Composite Shapes with Sectors 1 |  | MF34.16 | Volume of Composite Solids |  |
|  | MF32.16 | Area and Perimeter of Composite Shapes with Sectors 1 |  | MH34.17 | Problem Solving with Volume | (H) |
|  | MH32.19 | Area and Perimeter of Composite Shapes with Sectors <br> 2: Problem Solving |  | MH34.18 | Volume of Frustums | (H) |
| $\begin{aligned} & \check{y} \\ & \stackrel{0}{0} \\ & \stackrel{\pi}{5} \\ & \stackrel{\rightharpoonup}{m} \end{aligned}$ | MF33.01 | Planes of Symmetry |  | MF35.01 | Surface Area of Cuboids |  |
|  | MF33.02 | Nets of Cubes |  | F35.02 | Surface Area of Prism |  |
|  | MF33.03 | Plans and Elevations with Cuboids |  | MF35.02 | Surace Area of Prisms |  |
|  |  |  |  | MF35.03 | Surface Area of Cylinders |  |
|  | MF33.04 | Plans and Elevations |  |  |  |  |
| $\begin{aligned} & \text { © } \\ & \frac{E}{\overline{0}} \\ & \hline \end{aligned}$ | MF34.01 | Counting Cubes |  | MF35.04 | Surface Area of Part Cylinders |  |
|  | MF34.02 | Volume of Cubes and Cuboids |  | MF35.05 | Surface Area of Spheres |  |
|  | MF34.03 | Volume of Cubes and Cuboids with Missing Side(s) |  | MF35.06 | Surface Area of Cones |  |
|  | MF34.04 | Volume of Prisms 1: Given Area |  | MF35.07 | Surface Area of Pyramids |  |
|  | MF34.05 | Volume of Prisms 2: Triangular Prisms |  | MF35.08 | Surface Area of Composite Solids |  |
|  | MF34.06 | Volume of Prisms 3: Mixed Exercise |  | MH35.09 | Problem Solving with Surface Area | (H) |
| $\leftarrow$ Back to Curriculum Overview FE Mathematics Course Mapping <br> FE - Mathematics GCSE: Foundation \& Higher |  |  |  |  |  | 22 |


| Strand | Code | Nugget Name Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure |  |  |  | MF36.21 | Conversion Graphs: Interpreting |  |
|  | MF36.01 | Reading Scales | ${ }^{\sim}$ | MF36.22 | Conversion Graphs: Units of Measure |  |
|  | MF36.02 | Metric Units |  | MF37.01 | Reading a 12-Hour Clock 1: O'Clock and Half Past |  |
|  | MF36.03 | Estimating with Metric Units |  | MF37.02 | Reading a 12-Hour Clock 2: Multiples of 5 |  |
|  | MF36.04 | Converting Metric Length (One Step) |  | MF37.03 | Reading a 12-Hour Clock 3: Mixed |  |
|  | MF36.05 | Converting Metric Length (Multi-Step) |  | MF37.04 | Converting Time: AM and PM |  |
|  | MF36.06 | Converting Metric Length: Worded Questions | त | MF37.05 | Converting Time: Seconds, Minutes and Hours |  |
|  | MF36.07 | Converting Metric Mass (One Step) | $\sum_{\underline{\Sigma}}^{0}$ | MF37.06 | Converting Time: Days, Weeks and Years |  |
|  | MF36.08 | Converting Metric Mass (Multi-Step) | $\begin{aligned} & \bar{\pi} \\ & \stackrel{y}{0} \end{aligned}$ | MF37.07 | Calendar Months |  |
|  | MF36.09 | Converting Metric Mass: Worded Questions |  | MF37.08 | Converting Time: Mixed Units |  |
|  | MF36.10 | Converting Metric Capacity |  | MF37.09 | Problems with Time |  |
|  | MF36.11 | Converting Metric Volume 1 |  | MF37.10 | Converting Currency 1 |  |
|  | MF36.12 | Converting Metric Volume 2 |  | MF37.11 | Converting Currency 2: Double Conversions |  |
|  | MF36.13 | Converting Area 2: Unit Conversions |  | MF37.12 | Converting Currency: Mixed Problems |  |
|  | MF36.14 | Converting Area 1: Area Model |  | MF38.01 | Finding Speed (SDT) |  |
|  | MF36.15 | Converting Volume |  | MF38.02 | Finding Speed with Conversions (SDT) |  |
|  | MF36.16 | Metric and Imperial Length (No Calculator) |  | MF38.03 | Finding Distance (SDT) |  |
|  | MF36.17 | Metric and Imperial Length (Calculator) |  | MF38.04 | Finding Distance with Conversions (SDT) |  |
|  | MF36.18 | Metric and Imperial Mass and Volume (No Calculator) |  | MF38.05 | Finding Time (SDT) |  |
|  | MF36.19 | Metric and Imperial Mass and Volume (Calculator) |  | MF38.06 | Finding Time with Conversions (SDT) |  |
|  | MF36.20 | Conversion Graphs: Drawing |  | MF38.07 | Speed, Distance and Time: Mixed Questions |  |


| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF38.08 | Converting Units with Speed, Distance and Time |  | sбu!!eәg pue sбu!меда әןе्ડ | MF39.04 | Finding Scales without Units |  |
|  | MF38.09 | Understanding and converting units (DMV) |  |  | MF39.05 | Using Scales on a Map |  |
|  | MF38.10 | Finding Density (DMV) |  |  | MF39.10 | Creating Scale Diagrams |  |
|  | MF38.11 | Finding Density with Conversions (DMV) |  |  | MF39.06 | Introduction to Bearings |  |
|  | MF38.12 | Finding Mass (DMV) |  |  | MF39.07 | Bearings from North |  |
|  | MF38.13 | Finding Mass with Conversions (DMV) |  |  | MF39.08 | Finding Bearings 1 |  |
|  | MF38.14 | Finding Volume (DMV) |  |  | MF39.09 | Finding Bearings 2: Using Co-interior Angles |  |
|  | MF38.15 | Finding Volume with Conversions (DMV) |  |  | MF40.01 | Introduction to Reflection |  |
|  | MF38.16 | Density, Mass and Volume: Mixed Questions |  |  | MF40.02 | Finding the Line of Reflection |  |
|  | MF38.17 | Converting Units with Density, Mass and Volume |  |  | MF40.03 | Coordinates in Reflection |  |
|  |  |  |  |  | MF40.04 | Translating a Point |  |
|  | MF38.18 | Force, Pressure and Area |  |  |  |  |  |
|  |  |  |  |  | MF40.05 | Translating a Shape |  |
|  | MF38.19 | Distance-Time Graphs: Drawing |  |  | MF40.06 | Describing Translations |  |
|  | MF38.20 | Distance-Time Graphs: Interpreting |  |  | MF40.07 | Enlarging Shapes |  |
|  | MF38.21 | Distance-Time Graphs: Speed |  |  | MF40.08 | Enlargements with $0<S \mathrm{~F}<1$ |  |
|  | MH38.22 | Velocity-Time Graph: Interpreting | $(H)$ |  | MF40.09 | Enlargement with Centre (0,0) |  |
|  | MH38.23 | Velocity-Time Graph: Distance | $(H)$ |  | MF40.10 | Enlargement with Centre ( $\mathrm{x}, \mathrm{y}$ ) |  |
|  | MH38.24 | Velocity-Time Graph: Acceleration | $(H)$ |  | MF40.11 | Enlargement with Fractional Scale Factor (0,0) |  |
|  | MH38.25 | Velocity-Time Graph: Problem Solving | $(H)$ |  | MF40.12 | Enlargement with Fractional Scale Factor (x,y) |  |
|  | MF39.01 | Using Scales with Units |  |  | MH40.20 | Enlargement with Negative Scale Factor | (H) |
|  | MF39.02 | Finding Scales with Units |  |  | MH40.21 | Enlargement with Negative Fractional Scale Factor | (H) |
|  | MF39.03 | Using Scales without Units |  |  | MH40.22 | Enlargement with Mixed Scale Factor | (H) |
| $\leftarrow \text { Back }$ | Curriculum | $\begin{array}{ll}\text { Overview } & \text { FE Mathematics Course Mappin } \\ \text { FE }- \text { Mathematics GCSE: Foun }\end{array}$ | Higher | CENTURY |  |  | 24 |


| Strand | Code | Nugget Name | Course | Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF40.13 | Describing Enlargements with an Integer Scale Factor |  | $\begin{aligned} & n \\ & \stackrel{n}{4} \\ & \stackrel{0}{0} \\ & \gg \end{aligned}$ | MF41.01 | Column Vectors |  |
|  | MF40.14 | Describing Enlargements with a Non-Integer Scale Factor |  |  | MF41.02 | Column Vectors: Scalar Multiplication |  |
|  | MH40.23 | Describing Enlargements with Mixed Scale Factor | (H) |  | MF41.03 | Column Vectors: Addition and Subtraction |  |
|  |  |  |  |  | MF41.04 | Column Vectors: Drawing |  |
|  | MF40.15 | Rotation with Centre (0,0) |  |  | MF41.05 | Geometric Vectors 1: One Term |  |
|  | MF40.16 | Rotation with Centre ( $\mathrm{x}, \mathrm{y}$ ) |  |  | MF41.06 | Geometric Vectors 2: Two Terms |  |
|  | MF40.17 | Describing Rotation |  |  | MH41.07 | Geometric Vectors 3: Within Shapes | (H) |
|  | MF40.18 | Describing Transformations |  |  | MH41.08 | Geometric Vectors 4: Expand and Simplify | (H) |
|  | MF40.19 | Combination of Transformations 1 |  |  | MH41.09 | Geometric Vectors 5: Midpoints | (H) |
|  | MH40.24 | Combination of Transformations 2 | (H) |  | MH41.10 | Geometric Vectors 6: Ratios | (H) |
|  | MH57.01 | Angle in a Semicircle and Angle at Tangent | (H) |  | MH41.11 | Geometric Vectors 7: Fractions and Ratios | (H) |
|  | MH57.02 | Properties of Diameter and Radii | (H) |  | MH41.12 | Geometric Vectors 8: Parallel Vectors | (H) |
|  | MH57.03 | Tangents from an External Point | (H) |  | MH41.13 | Geometric Vectors 9: Proof | (H) |
|  | MH57.04 | Angles at the Centre | (H) |  | MF42.01 | Constructing Circles |  |
|  | MH57.05 | Angles on the Same Arc | (H) |  | MF42.02 | Constructing an Equilateral Triangle |  |
|  | MH57.06 | Angles at the Centre and on the Same Arc | (H) |  | M142.10 | Constructing Triangles |  |
|  | MH57.07 | Cyclic Quadrilaterals | (H) |  | MF42.03 | Perpendicular Bisector |  |
|  |  | Cyclic Quadrilaterals |  |  | MF42.04 | Angle Bisector |  |
|  | MH57.08 | Alternate Segment Theorem | (H) |  | MF42.05 | Perpendicular from a Point to a Line |  |
|  | MH57.09 | Mixed Circle Theorems 1: Practice | (H) |  | MF42.06 | Constructing Angles ( $30^{\circ}, 45^{\circ}, 60^{\circ}, 90^{\circ}$ ) |  |
|  | MH57.10 | Mixed Circle Theorems 2: Algebra | (H) |  | MF42.07 | Understanding Loci |  |
|  | MH57.11 | Mixed Circle Theorems 3: Two Theorems | (H) |  | MF42.08 | Loci 1: Single Constructions |  |
|  | MH57.12 | Mixed Circle Theorems 4: Challenge | (H) |  | MF42.09 | Loci 2: Multi-Step Problems |  |

[^4]FE Mathematics Course Mapping
FE - Mathematics GCSE: Foundation \& Higher




| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MF49.19 | Applying Averages and the Range 2: Tables |  |
|  | MF49.20 | Using Averages and Range |  |
|  | MF49.21 | Using Averages and Range: Comparing Two Data Sets |  |
|  | MF50.01 | Completing Two Way Tables |  |
|  | MF50.02 | Interpreting Two Way Tables |  |
|  | MF50.03 | Pictograms |  |
|  | MF50.04 | Bar Charts |  |
|  | MF50.05 | Multiple and Composite Bar Charts |  |
|  | MF50.06 | Vertical Line Graphs |  |
|  | MF50.07 | Creating Stem and Leaf Diagrams |  |
|  | MF50.08 | Interpreting Stem and Leaf Diagrams |  |
|  | MF50.09 | Creating Pie Charts (No Calculator) |  |
|  | MF50.10 | Creating Pie Charts (Calculator) |  |
|  | MF50.11 | Interpreting Pie Charts |  |
|  | MF50.12 | Time Series Graphs |  |
|  | MF50.13 | Drawing Scatter Graphs |  |
|  | MF50.14 | Interpreting Scatter Graphs 1: Introduction |  |
|  | MF50.15 | Interpreting Scatter Graphs 2: Outliers |  |
|  | MF50.16 | Frequency Polygons: Drawing |  |
|  | MF50.17 | Frequency Polygons: Interpreting |  |
|  | MF50.18 | Interpreting Misleading Data Representations |  |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MH60.01 | Cumulative Frequency 1: Calculating | (H) |
|  | MH60.02 | Cumulative Frequency 2: Drawing | (H) |
|  | MH60.03 | Cumulative Frequency 3: Calculating Frequency | (H) |
|  | MH60.04 | Cumulative Frequency 4: Finding Values | (H) |
|  | MH60.05 | Cumulative Frequency 5: Median | (H) |
|  | MH60.06 | Cumulative Frequency 6: Quartiles | (H) |
|  | MH60.07 | Cumulative Frequency 7: Interquartile Range | (H) |
|  | MH60.08 | Cumulative Frequency 8: Plot and Evaluate | (H) |
|  | MH60.09 | Box Plots 1: Interpret | (H) |
|  | MH60.10 | Box Plots 2: Finding Values to Plot | (H) |
|  | MH60.11 | Box Plots 3: Draw from List | (H) |
|  | MH60.12 | Box Plots 4: Draw from Data | (H) |
|  | MH60.13 | Box Plots 5: Evaluate and Compare | (H) |
|  | MH60.14 | Cumulative Frequency and Box Plots | (H) |
| $\begin{aligned} & \stackrel{n}{E} \\ & \underline{0} \\ & \frac{0}{0} \\ & 0 \\ & \underline{T H} \end{aligned}$ | MH61.01 | Frequency Density 1: Calculating | (H) |
|  | MH61.02 | Frequency Density 2: Problem Solving | (H) |
|  | MH61.03 | Histograms 1: Choosing Axes | (H) |
|  | MH61.04 | Histograms 2: Plotting | (H) |
|  | MH61.05 | Histograms 3: Calculating Frequency | (H) |
|  | MH61.06 | Histograms 4: <br> Calculating Frequency within a Given Range | (H) |
|  | MH61.07 | Histograms 5: Mixed Exercise (Consolidates 1-4) | (H) |
|  | MH61.08 | Histograms 6: Finding Fractions and Percentages | (H) |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MH61.09 | Histograms 7: Finding Proportions | (H) |
|  | MH61.0 | Histograms 8: Median | (H) |
|  | MH61.11 | Histograms 9: Mean | (H) |
|  | MH61.12 | Histograms 10: Mixed Exercise (Consolidates 6-9) | (H) |
| Topic Diagnostics |  |  |  |
|  | MFO.01 | Diagnostic: Number 1 |  |
|  | MF0.02 | Diagnostic: Algebra 1 |  |
|  | MF0.30 | Diagnostic: Ratio and Proportion 1 |  |
|  | MFO.03 | Diagnostic: Geometry 1 |  |
|  | MFO. 04 | Diagnostic: Number 2 |  |
|  | MF0.05 | Diagnostic: Probability 1 |  |
|  | MF0.06 | Diagnostic: Statistics 1 |  |
|  | MF0.07 | Diagnostic: Algebra 2 |  |
|  | MFO. 31 | Diagnostic: Ratio and Proportion 2 |  |
|  | MF0.08 | Diagnostic: Geometry 2 |  |
|  | MH0.09 | Diagnostic: Number 3 | (H) |
|  | MH0.10 | Diagnostic: Number 4 | (H) |
|  | MH0.11 | Diagnostic: Algebra 3 | (H) |
|  | MH0.12 | Diagnostic: Algebra 4 | (H) |
|  | MHO. 13 | Diagnostic: Algebra 5 | (H) |
|  | MHO. 32 | Diagnostic: Ratio and Proportion 3 | (H) |
|  | MHO. 14 | Diagnostic: Geometry 3 | (H) |
|  | MH0.15 | Diagnostic: Geometry - Circles and Circle Theorems | (H) |


| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MH0.16 | Diagnostic: Statistics 2 | (H) |
|  | MH0.17 | Diagnostic: Probability 2 | (H) |
|  | MH0.18 | Diagnostic: Geometry - Advanced Trigonometry | (H) |
|  | MF00.01 | Topic Diagnostic: Times Tables |  |
|  | MF00.02 | Topic Diagnostic: Calculations 1 |  |
|  | MF00.03 | Topic Diagnostic: Calculations 2 |  |
|  | MF00.04 | Topic Diagnostic: Negative Numbers |  |
|  | MF00.05 | Topic Diagnostic: Decimals |  |
|  | MH00.01 | Topic Diagnostic: Rounding and Estimating | (H) |
|  | MF00.06 | Topic Diagnostic: BIDMAS and Using a Calculator |  |
|  | MF00.07 | Topic Diagnostic: Fractions |  |
|  | MF00.08 | Topic Diagnostic: Fractions: Addition and Subtraction |  |
|  | MF00.09 | Topic Diagnostic: Fractions: Multiplication and Division |  |
|  | MF00.10 | Topic Diagnostic: Fractions of an Amount |  |
|  | MF00.11 | Topic Diagnostic: Factors, Multiples and Primes |  |
|  | MF00.12 | Topic Diagnostic: LCM and HCF 1 |  |
|  | MH00.02 | Topic Diagnostic: LCM and HCF 2 | (H) |
|  | MF00.13 | Topic Diagnostic: Percentages |  |
|  | MF00.14 | Topic Diagnostic: Fractions, Decimals and Percentages |  |
|  | MH00.03 | Topic Diagnostic: Recurring Decimals | (H) |
|  | MF00.15 | Topic Diagnostic: Bounds 1 |  |
|  | MH00.04 | Topic Diagnostic: Bounds 2 | (H) |




| Strand | Code | Nugget Name | Course |
| :---: | :---: | :---: | :---: |
|  | MH00.41 | Topic Diagnostic: Tree Diagrams 2 | (H) |
|  | MF00.67 | Topic Diagnostic: Sets and Venn Diagrams 1 |  |
|  | MH00.42 | Topic Diagnostic: Sets and Venn Diagrams 2 | (H) |
|  | MF00.68 | Topic Diagnostic: Collecting Data |  |
|  | MF00.69 | Topic Diagnostic: Displaying Data |  |
|  | MF00.70 | Topic Diagnostic: Averages and the Range |  |
|  | MF00.71 | Topic Diagnostic: Averages and the Range from a Frequency Table |  |
|  | MH00.43 | Topic Diagnostic: Cumulative Frequency | (H) |
|  | MH00.44 | Topic Diagnostic: Box Plots | (H) |
|  | MH00.45 | Topic Diagnostic: Histograms | (H) |

## Course Content

FE - Mathematics

## Functional Skills (Entry 1)



## Diagnostics 3 Strands 4 Nuggets 33

This course contains material to cover mathematics as part of the Functional Skills Entry Level 1 qualification. It is suitable for all exam boards.

## Strands

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

| Strand | Nuggets |
| :--- | :---: |
| Diagnostics | 3 |
| Number | 11 |
| Measure | 17 |
| Data | 5 |

## Nuggets

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

| Strand | Code | Nugget Name |
| :---: | :---: | :--- |
|  | MA0.01 | Diagnostic: Entry 1 - Non Calculator |
|  | MA0.02 | Diagnostic: Entry 1 - Calculator |
|  | MA0.03 | Diagnostic: Entry 1 |


| Strand | Code | Nugget Name |
| :---: | :---: | :---: |
| $\begin{aligned} & \dot{\Phi} \\ & \stackrel{0}{E} \\ & \frac{1}{3} \end{aligned}$ | MA1.01 | Read Numbers up to 20 |
|  | MA1.02 | Write Numbers up to 20 |
|  | MA1.03 | Compare Numbers up to 20 |
|  | MA1.04 | Order Numbers up to 20 |
|  | MA1.05 | Read, Write, Order and Compare - Exam Style |
|  | MA1.06 | Count Items up to 20 |
|  | MA1.07 | Recognise +, - and = |
|  | MA1.08 | Adding Numbers up to 20 |
|  | MA1.09 | Subtracting Numbers up to 20 |
|  | MA1.10 | Add and Subtract: Exam Style |
|  | MA1.11 | Checking Answers with Add and Subtract: Exam Style |
|  | MC2. 02 | Money 1: Recognise Coins and Notes |
|  | MC2.05 | Money 2: Exam-Style Questions |
|  | MA2.01 | Reading a 12-hour Digital Clock |
|  | MF37.01 | Reading a 12-Hour Clock 1: O'Clock and Half Past |
|  | MA2.02 | Days of the Week |
|  | MA2.03 | Months of the Year |
|  | MA2.04 | Seasons in a Year |
|  | MA2.05 | Days, Weeks, Months and Seasons |


| Strand | Code | Nugget Name |
| :---: | :--- | :--- |
|  | MA2.06 | Identifying 2D Shapes |
|  | MA2.07 | Identifying 2D and 3D Shapes |
| MA2.08 | Describe and Compare Size |  |
| MA2.09 | Weight and Capacity |  |
| MA2.10 | Length and Width |  |
| MA2.11 | Left and Right |  |
| MA2.12 | In Front and Behind |  |
| MA2.13 | Under and Above |  |
| MA2.14 | Positional Vocabulary (combined) |  |
| MC3.02 | Lists 1: Least and Greatest |  |
| MC3.03 | Lists 2: Finding Certain Values in Given Groups |  |
| MA3.01 | Sort and Classify Objects |  |
| MA3.02 | Tally Charts |  |
| MA3.03 | Block Diagrams |  |

## Course Content <br> FE - Mathematics <br> Functional Skills (Entry 2)



## Diagnostics 2 Strands 4 Nuggets 72

This course contains material to cover mathematics as part of the Functional Skills Entry Level 2 qualification. It is suitable for all exam boards.

## Strands

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course

| Strand | Nuggets |
| :--- | :---: |
| Diagnostics | 2 |
| Number | 32 |
| Measure | 30 |
| Data | 10 |

## Nuggets

A nugget is a micro-lesson that contains learning material followed by questions to assess learning

| Strand | Code | Nugget Name |
| :---: | :---: | :--- |
|  | MB0.01 | Diagnostic: Entry 2 - Non Calculator |
|  | MB0.02 | Diagnostic: Entry 2 - Calculator |
|  | MB0.03 | Diagnostic: Entry 2 |


| Strand | Code | Nugget Name |
| :---: | :--- | :--- |
|  | MB1.01 Count Items up to 100 <br> MB1.02 Read Numbers up to 200 <br> MB1.03 Write Numbers up to 200 <br> MB1.04 Compare Numbers up to 200 <br> MB1.05 Order Numbers up to 200 <br> MB1.06 Recognise Odd and Even Numbers <br> MB1.07 Sequence Odd and Even Numbers <br> MA1.07 Recognise +, - and = <br> MB1.08 Recognise x and $\div$ <br> MB1.09 Interpreting Mathematical Symbols <br> MB1.10 Adding Two-Digit Numbers 1 <br> MB1.11 Adding Two-Digit Numbers 2 <br> MB1.12 Subtracting Two-Digit Numbers 1 <br> MB1.13 Subtracting Two-Digit Numbers 2 <br> MB1.14 Adding and Subtracting Two-Digit Numbers <br> MB1.18 2 Digits Divided by 1 Digit (With Remainders) <br> MB1.17 Rounding to the Nearest 10 <br> MB1.15 Times Tables: 0 and 1 <br> MF1.04 Times Tables: 2, 5 and 10 <br> MF1.05 Times Tables: 3 and 4 <br>  MF1.06 |  |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | MB1.20 | Checking Answers Using Rounding |  | MB2.10 | Reading Simple Scales |
|  | MB1.21 | Recognising a Half and a Quarter |  | MB2.11 | Using Simple Scales |
|  | MB1.22 | Recognising a Tenth |  | MA2.07 | Identifying 2D and 3D Shapes |
|  | MB1.23 | Finding Fractions of Whole Numbers |  | MB2.12 | Naming 2D Shapes |
|  | MB1.24 | Reading and Writing Decimals |  | MB2.13 | Naming 3D Shapes |
|  | MB1.25 | Comparing and Ordering Decimals |  | MB2.14 | Describing 2D Shapes |
|  | MB1.26 | Adding and Subtracting Decimals |  | MB2.15 | Describing 3D Shapes |
|  | MC2.02 | Money 1: Recognise Coins and Notes |  | MA2.11 | Left and Right |
|  | MC2.05 | Money 2: Exam-Style Questions |  | MA2.12 | In Front and Behind |
|  | MB2.01 | Money 3: Coins and Notes Problems |  | MA2.13 | Under and Above |
|  | MF37.01 | Reading a 12-Hour Clock 1: O'Clock and Half Past |  | MA2.14 | Positional Vocabulary (combined) |
|  | MB2.02 | Reading a 12-hour Clock 2 |  | MB2.16 | Middle, Below, On Top |
|  | MB2.03 | Converting Time: $\mathbf{2 4}$ Hour Clock |  | MB2.17 | Between, Inside, Outside |
|  | MA2.04 | Seasons in a Year |  | MB2.18 | Forwards and Backwards |
|  | MA2.05 | Days, Weeks, Months and Seasons | $\stackrel{\pi}{0}$ | MC3.02 | Lists 1: Least and Greatest |
|  | MB2.04 | Hours in a Day and Weeks in a Year |  | MC3.03 | Lists 2: Finding Certain Values in Given Groups |
|  | MB2.05 | Reading the Date |  | MA3.02 | Tally Charts |
|  | MA2.08 | Describe and Compare Size |  | MC3. 01 | Tables |
|  | MA2.09 | Weight and Capacity |  | MB3. 01 | Diagrams |
|  | MA2.10 | Length and Width |  | MA3.03 | Block Diagrams |
|  | MB2.06 | Measures of Length |  | MB3. 02 | Bar Charts |
|  | MB2.07 | Measures of Weight |  | MA3. 01 | Sort and Classify Objects |
|  | MB2.08 | Measures of Capacity |  | MB3.03 | Sort and Classify Objects (two criteria) |
|  | MB2.09 | Read and Compare Positive Temperatures |  | MB3.04 | Representing Information in Bar Charts |

## Course Content

FE - Mathematics
Functional Skills (Entry 3)


## Diagnostics 3 Strands 4 Nuggets 75

This course contains material to cover mathematics as part of the Functional Skills Entry Level 3 qualification. It is suitable for all exam boards.

## Strands

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course

| Strand | Nuggets |
| :--- | :---: |
| Diagnostics | 3 |
| Number | 31 |
| Measure | 35 |
| Data | 9 |

## Nuggets

A nugget is a micro-lesson that contains learning material followed by questions to assess learning

| Strand | Code | Nugget Name |
| :---: | :---: | :--- |
|  | MC0.01 | Diagnostic: Entry 3 - Non Calculator |
|  | MC0.02 | Diagnostic: Entry 3-Calculator |
|  | MC0.03 | Diagnostic: Entry 3 |




FE Mathematics Course Mapping
FE - Mathematics Functional Skills (Entry 3)

| Strand | Code | Nugget Name |
| :---: | :---: | :--- |
|  | MC3.01 | Tables |
|  | MF50.04 | Bar Charts |
|  | MC3.02 | Lists 1: Least and Greatest |
|  | MC3.03 | Lists 2: Finding Certain Values in Given Groups |
|  | MF50.06 | Vertical Line Graphs |
|  | MC3.04 | Interpreting Tables |
|  | MC3.05 | Drawing Tables |
|  | MF50.05 | Multiple and Composite Bar Charts |
|  | MB3.03 | Sort and Classify Objects (two criteria) |

## Course Content FE - Mathematics Functional Skills (Level 1)

## Diagnostics 2 Strands 18 Nuggets 154

This course contains material to cover mathematics as part of the Functional Skills Level 1 qualification. It is suitable for all exam boards.

## Strands

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course

| Strand | Nuggets |
| :--- | :---: |
| Diagnostics | 3 |
| Integers | 16 |
| Decimals | 11 |
| Fractions | 10 |
| Percentages | 12 |
| Fractions, Decimals, and Percentages | 12 |
| Rounding | 6 |
| Proportion | 10 |
| Algebra | 2 |
| Measures | 17 |
| Angles | 8 |
| 2D and 3D shapes | 10 |


| Strand | Nuggets |
| :--- | :---: |
| Area and Perimeter | 9 |
| Volume and Surface Area | 3 |
| Handling Data | 15 |
| Probability | 5 |
| Functional | 4 |
| Money | 4 |

## Nuggets

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

| Strand | Code | Nugget Name |
| :---: | :---: | :---: |
|  | MD0.01 | Diagnostic: Level 1 - Non Calculator |
|  | MD0.02 | Diagnostic: Level 1 - Calculator |
|  | MD0.03 | Diagnostic: Level 1 |
| $\begin{aligned} & \stackrel{n}{0} \\ & \Phi \\ & \stackrel{0}{\leftrightarrows} \\ & \hline \end{aligned}$ | MF3.17 | Using a Calculator 1: Powers and Roots of a Single Number |
|  | MF2.01 | Integer Place Value |
|  | MC1.01 | Reading and writing numbers up to 1000 |
|  | MD1.01 | Reading Large Numbers |
|  | MD1.02 | Writing Large Numbers |
|  | MF2.02 | Mathematical Symbols |
|  | MF2.14 | Negative Numbers |
|  | MD1.04 | Ordering Integers |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \stackrel{\varrho}{6} \\ & \text { O} \\ & \stackrel{\oplus}{\leftrightarrows} \\ & \hline \end{aligned}$ | MD1.05 | Ordering Negatives |  | MD3.02 | Simplifying Fractions |
|  | MF3. 01 | Column Addition |  | MF4.05 | Shading Fractions |
|  | MF3.02 | Column Subtraction |  | MF4.02 | Ordering Fractions |
|  | MD1.06 | Addition and Subtraction: Worded Questions |  | MF4.39 | Fraction of Amounts: Modelling |
|  | MD1.07 | Multiplying by Powers of Ten |  |  |  |
|  | MD1.08 | Dividing by Powers of Ten |  | MD3.03 | Fraction of Amounts: Non-Calculator |
|  | MD1.09 | Multiplication and Division Facts |  | MD3.04 | Fraction of Amounts: Calculator |
|  | MD1.10 | Multiplication and Division: Worded Questions |  | MF4.06 | Mixed and Improper Fractions |
|  | MD1.11 | Squares |  | MD3.05 | Estimating Fractions |
|  | MD1.13 | Powers (Basic Calculator) | $\begin{aligned} & 0 \\ & \stackrel{0}{0} \\ & 0 \\ & \stackrel{0}{\omega} \\ & \stackrel{U}{0} \\ & \stackrel{0}{2} \end{aligned}$ | MF7.01 | Understanding Percentages |
| $\begin{aligned} & \frac{n}{0} \\ & \stackrel{E}{U} \\ & \stackrel{\Delta}{0} \end{aligned}$ | MF6.01 | Decimal Place Value |  | MD4. 01 |  |
|  | MF2.09 | Ordering Decimals |  |  | Finding 50\% |
|  | MD2.01 | Adding Decimals 1 |  | MD4.02 | Finding 25\% |
|  | MD2.02 | Adding Decimals 2 |  | MD4.03 | Finding 10\% |
|  | MF6.04 | Subtracting Decimals 1: Calculations |  | MD4.04 | Finding 5\% |
|  | MF6.05 | Subtracting Decimals 2: Worded Problems |  | MD4.06 | Finding Multiples of Tens in Percentages |
|  | MF6.06 | Multiplying Decimals 1 |  | MF7.15 | Percentages of Amounts: Modelling |
|  | MF6.07 | Multiplying Decimals 2 |  |  |  |
|  | MF6.09 | Dividing Decimals |  | MF7.14 | Estimate with Percentages |
|  | MF6.12 | Manipulating Decimal Calculations with Multiplication |  | MD4.08 | Comparing Percentages 1 |
|  | MF6.13 | Manipulating Decimal Calculations with Division |  | MD4.09 | Percentage Increase and Decrease: Functional Skills |
|  | MF4.01 | Expressing Fractions |  | MD4.10 | Simple Interest: Multiples of 5\% |
|  | MD3.01 | Equivalent Fractions |  | MD4.12 | Discounts |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fractions, Decimals, and Percentages | MF8. 01 | Introduction to Fractions, Decimals and Percentages | 은응은 | MD8.02 | Sharing with a Given Ratio 1 |
|  | MD5.01 | Converting Fractions to Denominator 100 |  | MD8.03 | Sharing with a Given Ratio 2 (Calculator) |
|  | MD5.02 | Fractions to Percentage |  | MD8.04 | Introduction to Proportion |
|  | MD5.03 | Fractions to Percentages (Calculator) |  | MD8.05 | Direct Proportion 1 |
|  | MD5.04 | Decimals to Percentage |  | MD8.06 | Recipe Ratio 1 |
|  | MD5. 05 | Percentage to Decimals |  | MD8.07 | Better Value |
|  | MD5. 06 | Fractions to Decimals 1 | $\begin{aligned} & \text { © } \\ & \frac{0}{6} \\ & \frac{0}{4} \end{aligned}$ | MF3.14 | BIDMAS Introduction |
|  | MD5.07 | Fractions to Decimals 2 |  | MF17.12 | Function Machines |
|  | MD5.08 | Fractions to Decimals (Calculator) |  | MF36.01 | Reading Scales |
|  | MD5.09 | Percentage to Fractions |  | MF36.02 | Metric Units |
|  | MD5.10 | Percentage to Fractions (Calculator) |  | MD10.01 | Estimating with Metric Units |
|  | MF8.14 | Ordering Fractions, Decimals and Percentages 1: Unit Fractions (Non-Calculator) |  | MD10.02 | Converting Metric Length (One-Step) |
|  | MD6.01 | Rounding to the nearest 10, 100 and 1000 |  | MD10.03 | Converting Metric Mass (One-Step) |
|  | MD6. 02 | Rounding to the Nearest Whole Number |  | MD10.04 | Converting Metric Capacity |
| $\begin{aligned} & \text { 즣 } \\ & \text { 등 } \end{aligned}$ | MD6.03 | Rounding to 1 Decimal Place |  | MD10.10 | Converting between Pounds ( $£$ ) and Pence (p) |
| $\begin{aligned} & \text { 亏ِ } \\ & \text { Oِ } \end{aligned}$ | MD6.04 | Rounding to 2 Decimal Places |  | MF37.01 | Reading a 12-Hour Clock 1: O'Clock and Half Past |
|  | MD6.05 | Introduction to Estimation |  | MF37.02 | Reading a 12-Hour Clock 2: Multiples of 5 |
|  | MD6.06 | Estimation: Functional Skills |  | MF37.03 | Reading a 12-Hour Clock 3: Mixed |
| $\begin{aligned} & \text { 든 } \\ & \text { 믈 } \\ & \text { 은 } \end{aligned}$ | MF15.01 | Introduction to Ratio |  | MD10.05 | Converting Time: AM and PM |
|  | MD8.01 | Simplifying Ratios |  | MD10.06 | Converting Time: Seconds, Minutes and Hours |
|  | MF15.12 | Converting Fractions into Ratios |  | MF37.07 | Calendar Months |
|  | MF15.15 | Sharing with a Given Ratio: Modelling |  | MD10.07 | Converting Time: Days, Weeks and Years |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | MD10.08 | Converting Time: Mixed Units |  | MF30.01 | Perimeter by Counting |
|  | MF37.09 | Problems with Time |  | MD12.01 | Perimeter of Rectangles |
|  | MD10.09 | Using Scales on a Map |  | MF30.02 | Perimeter of Regular Shapes 1: Calculate Perimeter |
| $\frac{\sqrt{0}}{\frac{0}{0}}$ | MF26.03 | Types of Angles 1: Diagrams |  | MF30.03 | Perimeter of Regular Shapes 2: Calculate Side Length |
|  | MF26.04 | Types of Angles 2: Numbers |  | MD12.02 | Perimeter of Rectilinear Shapes |
|  |  |  |  | MF31.01 | Area by Counting Squares |
|  | MD11.01 | Estimating Angles |  | MF31.02 | Estimating Area |
|  | MF26.11 | Measuring Angles 1: Angles < $180^{\circ}$ (horizontal) |  | MD12.03 | Area of Squares, Rectangles and Parallelograms |
|  | MF26.12 | Measuring Angles 2: Angles < $180^{\circ}$ |  | MD12.04 | Area of Rectilinear Shapes |
|  | MF26.13 | Measuring Angles 3: Angles > 180 ${ }^{\circ}$ |  | MF34.01 | Counting Cubes |
|  | MD11.02 | Drawing Angles |  | MF34.02 | Volume of Cubes and Cuboids |
|  | MD11.05 | Direction and Angles |  | MF34.03 | Volume of Cubes and Cuboids with Missing Side(s) |
|  | MF26.01 | Key Terms in 2D Geometry |  | MF50.04 | Bar Charts |
|  | MF26.06 | Naming 2D Shapes |  | MF50.06 | Vertical Line Graphs |
|  | MF29.02 | Reflective Symmetry |  | MF50.05 | Multiple and Composite Bar Charts |
|  | MD11.03 | Parallel and Perpendicular Lines |  | MD13.02 | Interpreting Pie Charts |
|  |  |  |  | MD13.03 | Completing Two Way Tables |
|  | MF26.02 | Key Terms in 3D Geometry |  | MF50.02 | Interpreting Two Way Tables |
|  | MF26.10 | Naming 3D Shapes |  | MD13.04 | Creating Pie Charts (No Calculator) |
|  | MF33.02 | Nets of Cubes |  | MD13.05 | Creating Pie Charts (Calculator) |
|  | MF33.03 | Plans and Elevations with Cuboids |  | MF48.03 | Tally Chart |
|  | MF33.04 | Plans and Elevations |  | MD13.06 | Grouped Tally Charts: Discrete Data |
|  | MD11.04 | Plan Drawings |  | MF50.12 | Time Series Graphs |


| Strand | Code | Nugget Name |
| :---: | :---: | :---: |
|  | MF49.03 | Mean 1: Positive Integers |
|  | MF49.04 | Mean 2: Decimals and Negatives |
|  | MF49.05 | Mean 3: Finding Missing Values |
|  | MD13.07 | Range 1 |
|  | MF49.08 | Range 2: Decimals and Negatives |
|  | MF46.01 | Probability Scale in Words |
|  | MF46.02 | Probability Scale in Numbers |
|  | MD14.01 | Listing Outcomes |
|  | MD14.02 | Calculating Probability |
|  | MD14.03 | Mutually Exclusive Events |
|  | MD15.01 | Functional: Number |
|  | MD15.02 | Functional: Area |
|  | MD15.03 | Functional: Perimeter |
|  | MD15.04 | Functional: Probability |
| $\begin{aligned} & \stackrel{\rightharpoonup}{\omega} \\ & \stackrel{0}{\circ} \end{aligned}$ | MD7.01 | Menus |
|  | MD7.02 | Wage Calculations |
|  | MD7.03 | Profit and Loss 1 |
|  | MD7.04 | Profit and Loss 2 |

## Course Content FE - Mathematics Functional Skills (Level 2)

## Diagnostics 3 Strands 18 Nuggets 285

This course contains material to cover mathematics as part of the Functional Skills Level 2 qualification. It is suitable for all exam boards.

## Strands

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

| Strand | Nuggets |
| :--- | :---: |
| Diagnostics | 3 |
| Integers | 20 |
| Decimals | 13 |
| Fractions | 23 |
| Percentages | 22 |
| Fractions, Decimals, and Percentages | 15 |
| Rounding | 7 |
| Money | 8 |
| Proportion | 17 |
| Algebra | 16 |
| Measures | 32 |
| Angles | 12 |


| Strand | Nuggets |
| :--- | :---: |
| 2D and 3D shapes | 17 |
| Area and Perimeter | 25 |
| Volume and Surface Area | 8 |
| Handling Data | 36 |
| Probability | 10 |
| Exam Style Practise | 4 |

## Nuggets

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

| Strand | Code | Nugget Name |
| :---: | :---: | :---: |
|  | ME0.01 | Diagnostic: Level 2 - Non Calculator |
|  | ME0.02 | Diagnostic: Level 2 - Calculator |
|  | ME0.03 | Diagnostic: Level 2 |
|  | MF3.17 | Using a Calculator 1: Powers and Roots of a Single Number |
|  | MF2.01 | Integer Place Value |
|  | MD1.01 | Reading Large Numbers |
|  | MD1.02 | Writing Large Numbers |
|  | MF2.02 | Mathematical Symbols |
|  | MF2.08 | Ordering Integers |
|  | MF2.14 | Negative Numbers |
|  | MF2.10 | Ordering Negatives |
|  | MF2.05 | Adding Negatives |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
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| $\begin{aligned} & \stackrel{n}{\omega} \\ & \text { © } \\ & \stackrel{\oplus}{\underline{E}} \end{aligned}$ | MF3. 01 | Column Addition | $\frac{n}{0}$$\stackrel{E}{\overline{0}}$©0 | ME2.05 | Manipulating Decimal Calculations with Multiplication |
|  | MF3.02 | Column Subtraction |  | ME2.06 | Manipulating Decimal Calculations with Division |
|  | MF3. 03 | Addition and Subtraction: Worded Questions | ME3.01 |  | Expressing Fractions |
|  | MF2.11 | Multiplying by Powers of Ten | ME3.02 |  | Equivalent Fractions |
|  | MF2.12 | Dividing by Powers of Ten | ME3.03 |  | Simplifying Fractions |
|  | MD1.09 | Multiplication and Division Facts | ME3.04 |  | Shading Fractions |
|  | MF12.01 | Squares | ME3.05 |  | Ordering Fractions |
|  | MF3.08 | Grid Multiplication | ME3.06 |  | Mixed and Improper Fractions |
|  | MD1.12 | Column Multiplication | MF4.07 |  | Adding Fractions 1: Same Denominator |
|  | MF3.11 | Short Division |  | MF4.08 | Adding Fractions 2: Convert 1 Denominator |
|  | MF3.13 | Multiplication and Division: Worded Questions |  | MF4.09 | Adding Fractions 3: Convert 1 Denominator (Sum >1) |
| $\frac{n}{0}$$\frac{E}{U}$00 | MF6. 01 | Decimal Place Value |  | MF4.10 | Adding Fractions 4: Convert all Denominators |
|  | MF2.09 | Ordering Decimals |  | MF4.36 | Fractions: Subtracting from 1 |
|  | MF6.02 | Adding Decimals 1: Calculations |  | MF4.11 | Subtracting Fractions |
|  | MF6.03 | Adding Decimals 2: Worded Problems |  | MF4.19 | Adding and Subtracting Improper Fractions |
|  | MF6.04 | Subtracting Decimals 1: Calculations |  | MF4.20 | Adding and Subtracting Mixed Numbers |
|  | MF6.05 | Subtracting Decimals 2: Worded Problems |  | MF4.21 | Adding and Subtracting Improper Fractions and Mixed Numbers |
|  | MF6.14 | Multiplying Decimals with Napier's Bones |  | MF4.39 | Fraction of Amounts: Modelling |
|  | ME2.01 | Multiplying Decimals 1 |  | ME3.07 | Fraction of Amounts: Non-Calculator |
|  | ME2.02 | Multiplying Decimals 2 |  | ME3.08 | Fraction of Amounts: Calculator |
|  | ME2.03 | Multiplying Decimals: Worded Questions |  | ME3.09 | Fractions of Amounts: Worded |
|  | ME2.04 | Dividing Decimals |  | MF4.40 | Fraction of Amounts: Modelling Finding the Whole |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ME3.10 | Increasing and Decreasing by Fractions |  | ME4.06 | Simple Interest: Functional Skills |
|  | ME3.11 | Express One Amount as a Fraction of Another |  | MF11.06 | Simple Interest (Calculator) |
|  | ME3.12 | Functional: Fractions |  | ME4.07 | Compound Interest |
|  | MF7.01 | Understanding Percentages |  | ME4.05 | Compound Interest and Depreciation ME4.05 |
|  | MF7.02 | Finding 50\% | Fractions, Decimals, and Percentages | MF8.01 | Introduction to Fractions, Decimals and Percentages |
|  | MF7.03 | Finding 25\% |  | MF8. 02 | Converting Fractions to Denominator 100 |
|  | MF7.04 | Finding 10\% |  | MF8.03 | Fractions to Percentage |
|  | MF7.05 | Finding 5\% |  | ME5.01 | Fractions to Percentages (Calculator) |
|  | MF7.06 | Finding 1\% |  | MF8.04 | Decimals to Percentage |
|  | MF7.07 | Finding Multiples of Tens in Percentages |  | MF8.05 | Percentage to Decimals |
|  | MF7.15 | Percentages of Amounts: Modelling |  | MF8.06 | Fractions to Decimals 1: Equivalent Fractions |
|  | MF7.14 | Estimate with Percentages |  | MF8.07 | Fractions to Decimals 2: Division |
|  | MF11.13 | Express One Amount as a Percentage of Another |  | ME5.02 | Fractions to Decimals (Calculator) |
|  | ME4.01 | Finding Percentages 1 (Calculator) |  | MF8.08 | Percentage to Fractions |
|  | MD4.08 | Comparing Percentages 1 |  | ME5.03 | Percentage to Fractions (Calculator) |
|  | MF7.12 | Comparing Percentages 2 |  | MF8.09 | Decimals to Fractions |
|  | MF11.04 | Percentage Change |  | ME5.04 | Decimals to Fractions (Calculator) |
|  | MF10.06 | Percentage Increase and Decrease: Modelling |  | MF8. 14 | Ordering Fractions, Decimals and Percentages 1: Unit Fractions (Non-Calculator) |
|  | MD4. 09 | Percentage Increase and Decrease: Functional Skills |  |  | Ordering Fractions, Decimals and Percentages 2: |
|  | ME4.03 | Percentage Increase and Decrease (Calculator) |  | MF8.15 | Non-Unit Fractions (Non-Calculator) |
|  | MF11.18 | Reverse Percentages Introduction: Modelling |  | MF2.13 | Rounding to the nearest 10,100 and 1000 |
|  | MF11.19 | Reverse Percentages: Modelling |  | MF9. 01 | Rounding to the Nearest Whole Number |
|  | ME4.04 | Reverse Percentage |  | MF9.02 | Rounding to 1 Decimal Place |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
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|  | MF9.03 | Rounding to 2 Decimal Places | $\begin{aligned} & \text { 들 } \\ & \text { 층 } \\ & \text { 은 } \\ & \hline \end{aligned}$ | MF16.01 | Introduction to Proportion |
|  | ME6.01 | Rounding to 3 decimal places |  | ME8.06 | Direct Proportion 1 |
|  | MF9.11 | Introduction to Estimation |  | ME8.07 | Inverse Proportion 1 |
|  | MD6.06 | Estimation: Functional Skills |  | ME8.08 | Recipe Ratio 1 |
| $\begin{aligned} & \text { ì } \\ & \stackrel{0}{0} \\ & \stackrel{1}{2} \end{aligned}$ | ME7.01 | Menus |  | ME8.09 | Recipe Ratio 2 |
|  | ME7.02 | Wage Calculations |  | MF16.04 | Better Value |
|  | ME7.03 | Profit and Loss 1 |  | ME8.10 | Better Value 2 |
|  | ME7.04 | Profit and Loss 2 | $\begin{aligned} & \text { 厄o } \\ & \frac{0}{6} \\ & \frac{0}{4} \end{aligned}$ | ME9.01 | Powers |
|  | ME7.05 | Functional: Profit 1 |  | ME9.02 | BIDMAS Introduction |
|  | ME7.06 | Functional: Profit 2 |  | ME9.03 | BIDMAS Intermediate |
|  | MD4.12 | Discounts |  | MF19.30 | Solving Equations: One Step Modelling (+ -) |
|  |  |  |  | MF19.01 | Solving Equations: One Step (+ -) |
|  | ME7.07 | Tax and Budgeting |  | MF19.31 | Solving Equations: One Step Modelling ( $\times$ ) |
|  | MF15.01 | Introduction to Ratio |  | MF19.02 | Solving Equations: One Step (×) |
|  | MF15.02 | Simplifying Ratios |  | MF19.03 | Solving Equations: One Step ( $\div$ ) |
|  | MF15.05 | 3 Part Ratios |  | MF19.04 | Solving Equations: One Step ( $+-\times \div$ ) |
|  | ME8.01 | Converting Ratios into the Form 1:n |  | MF17.01 | Forming Algebraic Expressions: One Step |
|  | ME8. 02 | Part of a Ratio to the Whole |  | MF17.02 | Forming Algebraic Expressions: Two Step |
|  | ME8.03 | Converting Fractions into Ratios |  | MF17.13 | Substitution into Expressions 1: One Term |
|  | MF15.15 | Sharing with a Given Ratio: Modelling |  | ME9.04 | Substitution into Expressions 2 |
|  | ME8.04 | Sharing with a Given Ratio 1 |  | ME9.05 | Substitution into Expressions 3 |
|  | ME8. 05 | Sharing with a Given Ratio 2 (Calculator) |  | ME9.07 | Substituting into a Formula |
|  | MF15.16 | Ratio Fluency: Modelling |  | ME9.08 | Functional: using a Formula |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | MF36.01 | Reading Scales |  | ME10.16 | Density, Mass and Volume: Mixed Questions |
|  | MF36.02 | Metric Units |  | MF37.01 | Reading a 12-Hour Clock 1: O’Clock and Half Past |
|  | MD10.01 | Estimating with Metric Units |  | ME10.17 | Reading a 12 -hour Clock 2 |
|  | ME10.01 | Converting Metric Length (One-Step) |  | ME10.18 | Reading a 12-hour Clock 3 |
|  | ME10.02 | Converting Metric Mass (One-Step) |  | ME10.19 | Converting Time: AM and PM |
|  | MF36.10 | Converting Metric Capacity |  | ME10.20 | Converting Time: Seconds, Minutes and Hours |
|  | MF36.22 | Conversion Graphs: Units of Measure |  | MF37.07 | Calendar Months |
|  | MF39.05 | Using Scales on a Map |  | ME10. 21 | Converting Time: Days, Weeks and Years |
|  | ME10.03 | Metric and Imperial Length (Calculator) |  | ME10.22 | Converting Time: Mixed Units |
|  | ME10.04 | Metric and Imperial Mass and Volume (Calculator) |  | ME10.23 | Problems with Time |
|  | ME10.05 | Conversion Graphs: Interpretin | $\begin{aligned} & \frac{\pi}{\sigma} \\ & \frac{0}{4} \end{aligned}$ | MF27.01 | Straight Line Angles 1: Multiples of $5^{\circ}$ |
|  |  | Conversion Graphs. Interpreting |  | MF27.02 | Straight Line Angles 2 |
|  | ME10.06 | Finding Scales with Units |  | MF27.04 | Angles Around a Point 1: Multiples of 5 |
|  | ME10.07 | Finding Scales without Units |  |  |  |
|  |  |  |  | MF27.05 | Angles Around a Point 2 |
|  | ME10.08 | Using Scales without Units |  | MF27.07 | Vertically Opposite Angles |
|  | MF39.10 | Creating Scale Diagrams |  | MF27.08 | Alternate Angles |
|  | ME10.09 | Finding Speed (SDT) |  | MF27.09 | Corresponding Angles |
|  | ME10.10 | Finding Distance (SDT) |  | MF27.10 | Co-interior Angles |
|  | ME10.11 | Finding Time (SDT) |  | MF28.01 | Angles in a Triangle 1 |
|  | ME10.12 | Speed, Distance and Time: Mixed Questions |  | MF28.02 | Angles in a Triangle 2: Isosceles Triangles |
|  | ME10.13 | Finding Density (DMV) |  | MF28.03 | Angles in a Triangle 3: Including Angles on a Straight Line |
|  | ME10.14 | Finding Mass (DMV) |  | MF28.04 | Angles in a Triangle 4: Including Angles in Parallel Lines |
|  | ME10.15 | Finding Volume (DMV) |  | MF28.05 | Angles in Quadrilaterals |


| Strand | Code | Nugget Name | Strand | Code | Nugget Name |
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|  | MF26.01 | Key Terms in 2D Geometry |  | MF31.01 | Area by Counting Squares |
|  | MF26.06 | Naming 2D Shapes |  | MF31.02 | Estimating Area |
|  | MF29.02 | Reflective Symmetry |  | MF31.03 | Area of Squares, Rectangles and Parallelograms |
|  | MF26.05 | Parallel and Perpendicular Lines |  | MF31.04 | Area of Right Angled Triangles |
|  | MF26.02 | Key Terms in 3D Geometry |  | MF31.05 | Area of Triangles |
|  | MF26.10 | Naming 3D Shapes |  | MF31.07 | Area of Trapeziums |
|  | MF33.02 | Nets of Cubes |  | MF31.06 | Area of Composite Shapes 1: Adding |
|  | ME11.01 | Nets of Cuboids |  |  |  |
|  | MF33.03 | Plans and Elevations with Cuboids |  | MF31.08 | Area of Composite Shapes 2: Subtracting |
|  | MF33.04 | Plans and Elevations |  | MF32.12 | Areas of Composite Shapes with Part Circles |
|  | ME11.02 | Plan Drawings |  | ME12.01 | Circumference using the Radius |
|  | MF42.01 | Constructing Circles |  | ME12.02 | Circumference using the Diameter |
|  | ME11.03 | Dimensions |  | ME12.03 | Circumference |
|  | MF23.01 | Understanding Coordinates: 1st Quadrant |  | ME12.04 | Area of a Circle from Radius |
|  | MF23.02 | Understanding Coordinates: 4 Quadrants |  | ME12.05 | Area of a Circle from Diameter |
|  | MF23.26 | Coordinates and 2D Shapes |  | ME12.06 | Area of a Circle |
|  | MF39.06 | Introduction to Bearings |  | ME12.07 | Functional: Perimeter |
|  | MF30.01 | Perimeter by Counting |  | MD15.02 | Functional: Area |
|  | MD12.01 | Perimeter of Rectangles |  | ME12.08 | Functional: Compound Perimeter |
|  | MF30.02 | Perimeter of Regular Shapes 1: Calculate Perimeter |  | ME12.09 | Functional: Compound Area |
|  | MF30.03 | Perimeter of Regular Shapes 2: Calculate Side Length |  | MF34.01 | Counting Cubes |
|  | MF30.04 | Perimeter of Composite Shapes 1 |  | MF34.02 | Volume of Cubes and Cuboids |
|  | MF30.05 | Perimeter of Composite Shapes 2: Worded Context |  | ME13.01 | Volume of Cubes and Cuboids with Missing Side(s) |



| Strand | Code | Nugget Name |
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| $\begin{aligned} & \text { 를 } \\ & \text { 言 } \\ & \text { 은 } \\ & \text { a } \end{aligned}$ | ME15.01 | Calculating Probability |
|  | ME15.02 | Mutually Exclusive Events |
|  | ME15.03 | Two Way Tables: Probability |
|  | MF46.10 | Frequency Trees |
|  | MF46.11 | Interpreting Frequency Trees |
|  | MF46.12 | Multiplication Law of Probability (AND) |
|  | ME15.04 | Functional: Probability |
|  | ME16.03 | Surface Area: Exam Practice |
|  | ME16.04 | Circles and Ratio: Exam Practice |
|  | ME16.05 | Two Way Tables: Exam Practice |
|  | ME16.06 | Missing Angles: Exam Practice |

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[^1]:    $\leftarrow$ Back to Curriculum Overview

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[^3]:    $\leftarrow$ Back to Curriculum Overview

[^4]:    - Back to Curriculum Overview

