



TeeJay Maths

National Curriculum

Course Planner - Key Stage 3 Book 2

Part A

To help schools develop their courses, TeeJay Publishers has produced a Course Planner for the National Curriculum Key Stage 3.

This Planner for our Book 2 (of 3) from TeeJay provides substance to what the content of each year includes, and gives an indication as to what is required on that year, with some basic examples where necessary.

It provides the basis of a course based on TeeJay's KS 3 Book 2 and includes a final column which will allow planners to list practical activities, ICT Resources and specific methodologies. (These can be typed into the boxes provided).

The Planner comes in 2 parts.

Part A lists all the National Curriculum Outcomes in order for that year as listed in the official document for all 3 books.

Part B lists the chapters from KS 3 Book 2 in the order we recommend schools should follow.

- Note :-**
- All of the work for the second third of the National Curriculum (Key Stage 3) appears in our Book 2.
 - TeeJay suggests that it would be preferable to progress through the book (in the order of your choice) and use this document as a checklist to make sure that the work of the appropriate work from the Curriculum has been covered.
 - At the beginning of the KS3 Book 2, there is a Chapter 0 which revises and consolidates all the work completed in TeeJay's Key Stage 3 Book 1.
 - Each book contains a set of answers for all the exercises. This allows for pupil self checking or peer marking.
 - At the end of each Chapter of each book is a "Revisit-Review-Revise" exercise. These could be used as diagnostic tools either before starting or after completing a topic.
 - Each of our books can be supplemented by using our Homework Packs.
 - The course is also supplemented and supported by TeeJay's KS 3 Year 2 Assessment/Diagnostics Pack. (Assessments are listed in purple).

Number

page 1

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | |
|------------------------|--|--------------------|-------|--------------------|-----------|--------------------|-------|------------|
| | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | Extension |
| Number and Place Value | • understand place value in whole numbers (Rev ⁿ) | 1 | 9-10 | 1 | 9-10 (R) | | | |
| | • round any number | 1 | 11 | 1 | 11 (R) | | | |
| | • round a number to a required number of significant figures | 1 | 12-13 | 1 | 11 (R) | | | |
| | • change a whole number to Standard Form (Scientific Notation) | | | 1 | 12-14 | 1 | 1-13 | |
| | • handle integers in context (Rev ⁿ) | 2 | 15-18 | 2 | 16-17 (R) | | | |
| | • calculate intervals across zero | 2 | 19-22 | 2 | 18-19 (R) | | | |
| | • handle all 4 operations including double negatives | 2 | 19-22 | 2 | 18-19 (R) | | | Bk 2 20-21 |
| | • solve practical questions involving integers | 2 | 23 | 2 | 22 (R) | | | |
| | • order integers on the number line | 2 | 18 | 2 | 17 (R) | | | |
| | • deal with multiples, lowest common multiple, factors and highest common factor | 6 | 54-57 | 5 | 55-56 (R) | | | |
| | • recognise what a prime number is | 6 | 58-59 | 6 | 57 (R) | | | |
| | • apply prime factorisation technique | | | 6 | 58 | | | |
| | • understand the unique factorisation theory | | | 6 | 58 | | | |
| | • handle powers 2 ³ , 5 ² , 3 ⁶ etc (Rev ⁿ) | 11 | 98-99 | | | | | |
| | • handle roots of perfect squares, cubes etc. | 11 | 100 | 11 | 94-95 (R) | | | |
| | • use irrationals like $\sqrt{2}$ and know difference between $\sqrt{2}$ and 1.414... | | | | 96 | | | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | Extension |
|---|--|--------------------|-------|--------------------|-----------|--------------------|-----------|------------|
| | | Chapter | Pages | Chapter | Pages | Chapter | Pages | |
| Addition and Subtraction | Pupils should be taught to : | | | | | | | |
| | • add & subtract all whole numbers in the context of problems | 4 | 37-39 | 4 | 39-41 (R) | 3 | 25-26 (R) | |
| Multiplication and Division | Pupils should be taught to : | | | | | | | |
| | • work with all 4 operations | 4 | 37-39 | 4 | 39-41 (R) | 3 | 25-26 (R) | |
| | • divide by 1 digit giving remainder as whole number, fraction or as a decimal | 4 | 37-39 | 4 | 39-41 (R) | 3 | 25-26 (R) | |
| | • multiply and divide by 10, 100, 1000 etc | 4 | 37-39 | 4 | 39-41 (R) | 3 | 25-26 (R) | |
| | • multiply and divide by 20, 300, 4000 etc | | | 4 | 44-45 | | | |
| | • multiply by 2 digits | 4 | 44-45 | 4 | 42-43 (R) | | | |
| | • divide by 2 digits | | | | | 3 | 28 | |
| | • Multiplication and division of numbers in Standard Form (calculator) | | | | | 1 | 14-15 | Bk 6 16-17 |
| • understand and use Bomdas including powers, roots and reciprocals | 4 | 46 | 4 | 46 | | | | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | Extension |
|----------|---|--------------------|-------|--------------------|-----------|--------------------|-----------|-----------|
| Decimals | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | |
| | • understand place value in decimals | 7 | 61-62 | | | 5 | 43 | |
| | • round to any number of decimal places and | 7 | 63-65 | 7 | 63 (R) | | | |
| | • round to any number of significant figures and find resulting errors in the form $A < x \leq B$ | | | | | 5 | 43 | |
| | • use all 4 operations including multiplication in decimals | 7 | 66-69 | 7 | 60-62 (R) | 5 | 39-41 (R) | |
| | • multiply by 10, 100, 1000 etc | 7 | 70-71 | 7 | 63 (R) | 5 | 39-41 (R) | |
| | • divide by 10, 100, 1000 etc | 7 | 70-71 | 7 | 63 (R) | 5 | 39-41 (R) | |
| | • multiply by 20, 300, 4000 etc | | | 7 | 64 | 5 | 39-41 (R) | |
| | • divide by 20, 300, 4000 etc | | | 7 | 65 | 5 | 39-41 (R) | |
| | • multiply decimals 0.32×0.5 | | | 7 | 66 | 5 | 42 (R) | |
| | • divide decimals $2.85 \div 0.05$ | | | 7 | 67 | 5 | 42 (R) | |
| | • order decimals on the number line | 7 | 61-62 | | | | | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | Extension |
|----------------------------------|---|--------------------|---------|--------------------|-------------|--------------------|-----------|-----------|
| Fractions | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | |
| | • add, subtract fractions and multiply basic fractions | 9 | 87-90 | 9 | 80-81 (R) | 7 | 53-55 (R) | |
| | • find a fraction of a quantity | 9 | 85-86 | 9 | 80-81 (R) | 7 | 53-55 (R) | |
| | • divide simple fractions | | | 9 | 83 | 7 | 53-55 (R) | |
| | • multiply mixed numbers | | | 9 | 82 | 7 | 53-55 (R) | |
| | • divide mixed numbers | | | 9 | 84 | 7 | 53-55 (R) | |
| | • order fractions on a number line | 9 | 83-84 | | | 7 | 53-55 (R) | |
| Percentages | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | Extension |
| | • understand what a percentage is | 13 | 108-109 | 13 | 109-111 (R) | 9 | 65-66 (R) | |
| | • convert between Percentages <-> Decimals <-> Fractions e.g $\frac{3}{8} = 0.375 = 37.5\%$ | 13 | 110 | 13 | 109-111 (R) | 9 | 65-66 (R) | |
| | • find a percentage of a quantity by converting to equivalent fraction or by using a calculator where appropriate | 13 | 111-115 | 13 | 109-111 (R) | 9 | 65-66 (R) | |
| | • calculate percentage rise and fall | | | 13 | 112-114 | 9 | 66-67 (R) | |
| | • express A as a percentage of B | | | 13 | 115-116 | 9 | 68-69 (R) | |
| | • compare quantities using %ages | | | | | 9 | 70 | |
| | • perform simple interest calculations | | | | | 9 | 71-72 | |
| • handle original Value Problems | | | | | 9 | 73-74 | | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | |
|--|---|--------------------|---------|--------------------|-------------|--------------------|-----------|-----------|
| <p>Ratio and Proportion</p> | <p>Pupils should be taught to :</p> | Chapter | Pages | Chapter | Pages | Chapter | Pages | Extension |
| | <ul style="list-style-type: none"> • convert units of time, length, volume/capacity | 8 | 75-76 | | | | | |
| | <ul style="list-style-type: none"> • scale up/down figures using scales and maps | 18 | 151-157 | 19 | 163-169 (R) | 4 | 30-31 (R) | |
| | <ul style="list-style-type: none"> • be aware of the connection between fractions and ratios | 17 | 142-144 | 18 | 155-156 (R) | | | |
| | <ul style="list-style-type: none"> • simplify a ratio | 17 | 142-144 | 18 | 155-156 (R) | | | |
| | <ul style="list-style-type: none"> • Share equally in given ratio part:part or part:whole | 17 | 145-146 | 18 | 155-156 (R) | | | |
| | <ul style="list-style-type: none"> • use direct proportion & its graph | | | 18 | 157-161 | 11 | 84-87 (R) | |
| | <ul style="list-style-type: none"> • understand and use inverse proportion, including the graph. | | | | | 11 | 88-92 | |
| <ul style="list-style-type: none"> • handle problems involving :- <ul style="list-style-type: none"> • speed, • unit pricing (best buy) • density | various | | various | | various | | | |
| | | | | | | | | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | Extension |
|---------|--|--------------------|-------|--------------------|-----------|--------------------|---------|-----------|
| ALgebra | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | |
| | • know $a \times b = ab$, $3 \times p = 3p$ $a \div b = \frac{a}{b}$ $a \times a = a^2$, $a \times a \times a \times b \times b = a^3b^2$ | 5 | 48-49 | 5 | 48-49 (R) | | | |
| | • work with fraction coefficients like $\frac{1}{2}x + \frac{3}{4}y$ | | | | | 2 | 22-23 | |
| | • multiply brackets $2a(a + 3b)$ | 5 | 50-52 | 5 | 50-51 (R) | | | |
| | • collect like terms and simplify expressions | 5 | 50-52 | 5 | 50-51 (R) | | | |
| | • factorise (common factor only) | | | 5 | 52-53 | | | |
| | • solve basic equations like $x + 1 = 9$, $2x = 14$, $3x - 1 = 20$ | 10 | 92-96 | 10 | 88 (R) | | | |
| | • solve harder equations like :- $5x - 1 = 2x + 11$, $3(2x + 1) - x = 7x$ | | | 10 | 89-92 | 2 | 19-23 | |
| | • solve simple inequalities like $x - 1 < 8$, $3x \geq 21$, $6x - 3 \leq 3x + 24$ | | | 14 | 118-120 | 6 | 47-51 | |
| | • substitute values in expressions. | | | | | 8 | 57-58 | |
| | • make up formulae from given info | | | | | 8 | 59-60 | |
| | • change the subject of a formula understand what a sequence is | | | | | 8 | 61-63 | |
| | • generate terms given formula like $u_n = n^2 + 1$ | | | | | 14 | 116-117 | |
| | • generate terms given relationship between terms like $u_n = 3u_{n-1} + 1$ with $u_1 = 2$ | | | | | 14 | 118-119 | |
| | • recognise an arithmetic sequence and find the n^{th} term | | | | | 14 | 120-121 | |
| | • recognise a geometric sequence and find the n^{th} term | | | | | 14 | 122-123 | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | Extension |
|--------------------------------|---|--------------------|---------|--------------------|-----------|--------------------|-----------|-----------|
| | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | |
| Geometric Properties of Shapes | • label sides and angles in triangle ABC and understand congruence | 3 | 25-27 | 3 | 24-25 (R) | | | |
| | • use angle properties round a point, along a straight line | 3 | 28-31 | 3 | 24-25 (R) | | | |
| | • use the properties of parallel lines to calculate corresponding, | | | 3 | 26-28 | | | |
| | • use the properties of parallel lines to calculate alternate, | | | 3 | 29-32 | | | |
| | • use the fact that the sum of angles in a triangle = 180° to calculate sizes of missing angles | 3 | 32-34 | 3 | 24-25 (R) | | | |
| | • determine the sum of angles in a polygon | | | 3 | 33-36 | | | |
| | • construct scale drawings including calculations (Triangles etc) | | | 19 | 163-166 | 5 | 30-31 (R) | |
| | • construct congruent shapes and construct similar shapes by enlargement (>1) with and without a coordinate grid | 18 | 151-152 | | | | | |
| | • construct the following using ruler and compasses :- <ul style="list-style-type: none"> • perpendicular bisector of a line • angle bisector • perpendicular from a point to a line and know this is the shortest distance from the point to the line | | | | | 4 | 32-33 | |
| | | | | | 4 | 34-35 | | |
| | | | | | 4 | 36-37 | | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | Extension |
|--|--|--------------------|-------|--------------------|---------|--------------------|------------------|-----------|
| Geometric Properties of Shapes (cont'd) | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | |
| | <ul style="list-style-type: none"> understand and use Pythagoras' Theorem in a right angled triangle to calculate hypotenuse | | | 20 | 171-178 | 15 | 125-127, 128 (R) | |
| | <ul style="list-style-type: none"> calculate a shorter side | | | 20 | 179-183 | 15 | 125-127 (R) | |
| | <ul style="list-style-type: none"> understand and use Basic right angle triangle Trigonometry (???) using tangent - side or angle | | | | | 17 | 143-152 | |
| | <ul style="list-style-type: none"> use sine to find side or angle | | | | | 19 | 165-168 | |
| | <ul style="list-style-type: none"> use cosine to find side or angle | | | | | 19 | 169-172 | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | Extension |
|---|---|--------------------|---------|--------------------|---------|--------------------|------------|-----------|
| | | Chapter | Pages | Chapter | Pages | Chapter | Pages | |
| Geometric Position and Direction | Pupils should be taught to : | | | | | | | |
| | • apply translations, reflections and rotations to shapes in and not in a coordinate diagram | 16 | 133-140 | 17 | 146-152 | | | |
| | • handle coordinates in all 4 quadrants (Rev ⁿ) | | | 17 | 146-147 | 12 | 98-100 (R) | |
| | • draw/recognise line like $y = 3x + 1$ and know that gradient $m = 3$ and that y-intercept is at (0, 1) | | | | | 12 | 95-103 | |
| | • rearrange $ax + by + c = 0$ to the form $y = mx + c$, pick out gradient and y-intercept and sketch line | | | | | 12 | 104-105 | |
| | • Solve linear equation $ax + by + c = 0$ or $y = mx + c$ by replacing x (or y) by a value and finding the value of the other variable | | | | | 12 | 95-105 | |
| | • draw two given lines and solve the simultaneous equations <u>graphically</u> | | | | | 12 | 106-107 | |
| | • draw quadratic graphs of form :- $y = ax^2 + bx + c$ by plotting points from a table (including scaling of y or x axis) | | | | | 16 | 133-137 | |
| | • use quadratic graphs to estimate the value of y given x | | | | | 16 | 133-137 | |
| | • sketch or read from exponential graphs and reciprocal graphs and find approximate solutions for y given x and vice versa. | | | | | 16 | 138-139 | |
| • sketch or read piecewise graph & solve for x or y given the other | | | | | 16 | 140-141 | | |

| Outcome | Contents (Statutory) | Key Stage 3 Book 1 | | Key Stage 3 Book 2 | | Key Stage 3 Book 3 | | |
|--------------------|--|--------------------|--------------|--------------------|--------------|--------------------|--------------|------------------|
| Statistics | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | Extension |
| | • construct/read from tables, charts, frequency tables, bar charts, pie charts, pictographs | 14 | 117-122 | 15 | 122-125 (R) | | | |
| | • construct/read vertical line graphs (bar graphs) for grouped AND ungrouped data | 14 | 117-122 | | | | | |
| | • Construct/read stem and leaf diagrams | | | 15 | 126-128 | | | |
| | • construct/read scattergraphs | 14 | 123-125 | | | | | |
| | • calculate mean, mode, median from ungrouped data and find measure of spread (range) and outliers | 19 | 159-165 | | | | | |
| Probability | Pupils should be taught to : | Chapter | Pages | Chapter | Pages | Chapter | Pages | Extension |
| | • calculate the probability of an event happening as a decimal or fraction (percentage ?) $0 \leq P \leq 1$ | 20 | 167-172 | 21 | 179-180 | | | |
| | • determine the probability of an event happening in real situations and predict how often an event will happen | 20 | 167-172 | 21 | 181 | | | |
| | • use Venn Diagrams, tables and grids to study the union and intersection of sets | | | | | 18 | 158-163 | |
| | • calculate theoretical probabilities involving single or combined events with equally likely, mutually exclusive outcomes | | | 21 | 182-183 | 18 | 154-157 | |



TeeJay Maths

Part B

National Curriculum

Key Stage 3 Course Planner - Following Book 2 order

Based on TeeJay's **Key Stage 3 Book 2** along with TeeJay's **Assessment Pack** for **KS3 Book 2**.

Book Chapters are listed **FIRST** and the associated National Curriculum Outcomes are then listed and a reference is made to the relevant chapters.

This time, to help schools develop their courses, **TeeJay Publishers** has produced a **Course Planner** for our **KS 3 Book 2**.

This version of the **Planner** from **TeeJay** provides substance to what the content of each level includes, and gives an indication as to what is required at that level, with some basic examples where necessary.

It provides the basis of a course based on TeeJay's **KS 3 Book 2** and includes a final column which will allow planners to list practical activities, ICT Resources and specific methodologies.

Key Stage 3 Book 2

page 1

| Ch | Heading | Pgs | Topics | KS3 Book 2 | Comments/Methodology/Assessments |
|----|-----------------------------|---|--|------------|--|
| 0 | Revision | 1-11 | Revision of all Key Stage 3 Book 1 | | Ch 21 from Key Stage 3 Book 1 (changed) |
| 1 | Whole No's 1 | 12-13 14 15-17 18 | Revise Place value for any whole number Revise rounding to the nearest 10, 100, 1000 etc and sig figs Standard Form for numbers > 1 and inverse Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 1 pages 6-7 (changed) Key Stage 3 Book 1 Ch 1 page 11 (changed) CfE 4+ Ch 10 page 66-67 reset (3 pages) Some of CfE 4+ Ch 10 page 72 |
| 2 | Negative Numbers (Integers) | 19-20 21-22 23-24 25 26 27 28 | Revise negative numbers in context and on the number line Revise all 4 operations including double negative Negative number work applied to algebraic terms $(-2a) \times (-3ab)$ etc A mixture Squares and square roots Rational and irrational numbers Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 2 pages 15-18 - 2 pgs - (changed) Key Stage 3 Book 1 Ch 2 pages 19-23 - 2 pgs - (changed) Newish - Aus Bk 7 page 132 ??? CfE Book 3a Ch 4 page 39 CfE Book 3a Ch 4 page 39 CfE Book 3a Ch 4 page 39 CfE Book 3a Ch 4 pages 40 with algebra added |
| 3 | Angles | 29-30 31-33 34-35 36-37 38-39 40-41 42-43 | Revise all angle work up to sum of angles in a triangle Parallel lines and corresponding angles Parallel lines and alternate angles A mixture Angles in quadrilaterals Angles in polygons (NEEDS CHANGING) Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 3 35-36 (changed) CfE Book 3b Ch 6 pages 56-58 CfE Book 3b Ch 6 pages 59-60 CfE Book 3b Ch 6 pages 61-62 CfE 4+ Ch 2 page 13 + 1 page New - I'll do this Bk 3a page 31, Bk 3b Page 63 + quads and polygons |
| 4 | Whole No's 2 | 44-46 47-48 49-50 51 52 | Revise all 4 operations including mult/divide by 10, 100, 1000 etc Multiplication by two digits Multiplication/division by 20, 300, 4000, etc BOMDAS including powers, roots, reciprocals Revisit-Revise-Review | | Aus Bk 7 Ch 1 pgs 10-12 & KS3 Book 1 Ch 4 42-43 (change) English Book 6 Ch 1 page 15-16 (change figures) Aus Bk 7 Ch 1 pages 15-16 Aus Bk 7 Ch 1 page 17 + powers, roots etc (or 2B age 11) English Book 6 pages 18 and 45 (Qu 3/4) (a selection) |
| | | | | | |

Key Stage 3 Book 2

page 2

| Ch | Heading | Pgs | Topics | KS3 Book 2 | Comments/Methodology/Assessments |
|----|-----------------------|---|---|------------|--|
| 5 | Algebra 1 | 53-54 55 56-57 58 | Revise simplification of an expression Revise simplify expressions like $2a + 5b - a - 7b$ and $2(2x + y) - 3(x - y)$ Factorise (common factors only) Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 5 pages 48-49 (changed) Key Stage 3 Book 1 Ch 5 pages 50-52 (changed) National Book N4-2 Ch 17 page 239-240 CfE Book 3a Ch 7 page 65 and N4-2 page 241 Qu 5-7 |
| 6 | Multiples and Factors | 55 56 57 58 59 60 | Revise multiple and LCM Revise factors and HCF Revise prime numbers Mixed exercise Prime factorisation and Prime Factorisation theory Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 6 pages 54-57 selection - (changed) Key Stage 3 Book 1 Ch 6 pages 54-57 selection - (changed) Key Stage 3 Book 1 Ch 6 pages 58-59 (1 page selection) Key Stage 3 Book 1 Ch 6 pages 58-59 (1 page selection) CfE Book 3b Ch 3 page 32 CfE Book 3b Ch 3 page 33 |
| 7 | Decimals | 61-62 63-64 65-66 67 68 69 | Revise addition, subtraction and $\text{mult}^n/\text{div}^n$ by 1 digit whole number Revise rounding and multiplication/division by 10, 100, 1000 etc Multiplication and division by 20, 300, 4000, etc Multiplication of two decimals $\Rightarrow 2.71 \times 0.3$ Divide two decimals $2.96 \div 0.4$, $0.2265 \div 0.05$ Revisit-Revise-Review | | Key Stage 3 Book 1 Ch7 pages 61-69 selection (changed) Key Stage 3 Book 1 Ch 7 pages 70-71 - 1 page (changed) Newish Aus Bk 7 Ch 11 page 99 Aus Bk 7 Ch 11 page 100 KS3 Book 1 Ch 5 page 74 + Aus Bk 7 page 103 - some |
| 8 | Length and Area | 70-71 72-74 75-76 77-78 79 | Revise area of a rectangle, square, triangle, and parallelogram Area of a rhombus and kite Area of a trapezium Composite areas Revisit-Revise-Review | | Eng Ch 8 page 82 - (changed) - 2 pages CfE Book 3a Ch 8 pages 69-71 CfE Book 3a Ch 8 page 74 CfE Book 3a Ch 8 pages 75-76 CfE Book 3a Ch 8 page 77 |
| 9 | Fractions | 80 81 82 83 84 85 | Revise all fraction work up to basic multiplication $\frac{3}{4} \times \frac{6}{11}$ Multiplication of mixed numbers Division of basic fractions $\frac{5}{12} \div \frac{10}{11}$ Division of mixed numbers A mixture including problems Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 9 page 90 (changed) - 2 pages CfE Book 3b Ch 8 page 76 CfE Book 3b Ch 8 page 77 CfE Book 3b Ch 8 page 78 CfE Book 3b Ch 8 pages 79 along with + and - CfE Book 3b Ch 8 page 80 and CfE 4+ Ch 21 page 184 |
| | | | | | |

| Ch | Heading | Pgs | Topics | KS3 Book 2 | Comments/Methodology/Assessments |
|----|--------------------------------|--|---|------------|--|
| 10 | Algebra 2 | 86 87-88 89-91 92 | Revise all equations up to the form $3x - 1 = 20$ Solve equations of the form $7x - 1 = 3x + 19$, $3(2x - 1) = x + 17$ Make up equations from wordy problems (harder) and solve Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 10 page 97 - (changed) CfE Book 3b Ch 5 pages 50-51 New CfE Book 3b Ch 5 page 54 Qu 1-3 + problems |
| 11 | Circle work (Circ and Area) | 93-95 96-97 98-100 101-103 104 | Revise circumference of a circle including composites Calculate D (or r) knowing $C \Rightarrow D = C/\pi$ Devise formula for the area of a circle and use it Problems involving half and quarter circles and composite Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 12 page 107 changed (+ 1 more) CfE Book 3a Ch 10 pages 93-94 CfE Book 3a Ch 14 pages 125-127 CfE Book 3a Ch 14 pages 128-129 + 1 more (+130 ??) N4-2 Ch 8 page 127 |
| 12 | Percentages | 105-107 108-110 111-112 113 | Revise percentages and calculate a percentage using fractions/calcs Percentage rise and percentage fall (3 line approach) Express A as a percentage of B Revisit-Revise-Review | | N4-1 pages Ch 4 pages 41-43 Aus Book 7 Ch 13 pages 112-114 National Book N5 Ch 2 page 22 + 1 more page Aus Bk 7 Ch 8 page 79 and 118 and N5 page 28 - a couple |
| 13 | Algebra 3 | 114-115 116-17 118 | Introduce the $<$, \leq , $>$, \geq signs and solve $x < 2$ from $\{-3, -2, -1, 0, 1, 2, 3\}$ Solve inequalities of the form $x + 7 > 10$, $3x \leq 15$, $4x + 3 \geq 23$ Revisit-Revise-Review | | N4-1 Ch 22 page 232 N4-1 Ch 22 page 233 + 1 more N4-1 Ch 22 page 234 Qu 6-7 and more (a couple of eqns) |
| 14 | Statistics 1 | 119-120 121-122 123-125 126 127-129 130-131 | Revise basic pie charts Pie charts - harder using tables and protractor Stem and leaf diagrams Scattergraphs Scattergraphs - line of best fit Revisit-Revise-Review | | Key Stage 3 Book 1 Ch 14 pages 120-122 some - (changed) Aus Bk 7 Ch 15 pages 128-129 CfE Book 3b Ch 12 pages 132-134 N4-2 Ch 16 pages 224-227 N4-2 Ch 16 pages 224-227 N4-1, 250, 253 Aus Bk 7 pge 131 and 3b pge 137 - selection |
| 15 | Volume | 132-133 134-135 136-137 138-140 141 | Revise volumes of cubes and cuboids Liquid Volume - Capacity Volume of prisms $V = A_{\text{base}} \times \text{height}$ Volume of cylinder $V = \pi r^2 h$ Revisit-Revise-Review | | N4-2 Ch 11 pages 160-162 and 162-165 - selection - 4 pgs N4-2 Ch 11 pages 160-162 and 162-165 - selection - 4 pgs N4-2 Ch 11 pages 170-172 N4-2 Ch 11 pages 166-169 N4-2 Ch 11 pages 173-174 (more cylinders) |
| | | | | | |

| Ch | Heading | Pgs | Topics | KS3 Book 2 | Comments/Methodology/Assessments |
|----|-------------------------------|--|--|------------|---|
| 16 | Pythagoras 1 | 142-143 144-145 145-148 149 | Revise squares and square roots Pythagoras' Theorem (Intro) Pythagoras' Theorem and simple triangles to find hypotenuse Revisit-Revise-Review | | N4-1 Ch 13 pages 151-153 - reduce to 2 pages N4-1 Ch 13 pages 154-155 N4-1 Ch 13 pages 155-158 N4-1 Ch 13 page 162 Ch 25 page 261 - 1 page |
| 17 | Coordinates & Transformations | 149-150 151-153 154-155 156 | Revise coordinates in 4 quadrants Translation and reflection in all 4 quadrants Rotation in a coordinate diagram Revisit-Revise-Review | | Aus Bk 7 Ch 20 pages 166-167 Aus Bk 7 Ch 20 pages 168-170 Aus Bk 7 Ch 20 pages 171-172 Aus Bk 7 Ch 20 pages 173-174 |
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