

S2 Level 4 – Pupil Information Sheet for Block 1

CHANCE AND UNCERTAINTY	MNU 3-22a MNU 4-22a	NS	OT	VG
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Calculating basic probability
 Calculating the probability of successive events
 Using probability to predict events
TJ 4+ Pages 200 - 203
L&L Level 4 Pages 334 - 345

SPEED DISTANCE AND TIME	MTH 4-10b	NS	OT	VG
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Calculating distance travelled
 Calculating average speed
 Calculating time taken
 Converting hours and minutes into decimal time and vice versa
 Time/Distance graphs
TJ 4+ Pages 101 -110
L&L Level 4 Pages 116 -125

MONEY	MNU 4-09b/c	NS	OT	VG
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Calculating wages – weekly, monthly or annual salary
 Calculating gross pay and net pay
 Calculating Income Tax and Value Added Tax (VAT)
 Understanding Hire Purchase
 Calculating insurance premiums
 Foreign exchange conversions
TJ 4+ Pages 21 - 30
L&L Level 4 Pages 86 – 91, 99 – 103

NUMBER WORK	MNU3-01a MNU 4-03a MNU 3-04a	NS	OT	VG
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Rounding to a given number of significant figures
 Order of operation - BODMAS
 Adding, subtracting, multiplying and dividing integers
TJ 4+ Pages 6 - 10
L&L Level 4 Pages 35 - 38

ANGLE PROPERTIES	MNU 3-17a	NS	OT	VG
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Revision of complementary and supplementary angles
Revision of angles in parallel lines
Calculating missing angles in a quadrilateral

TJ 4+ Pages 11 - 14

REVISION FOR S2 LEVEL 4 BLOCK 1 TEST	
Topic	Questions from TJ Book 4+
Chance and uncertainty	Page 201 Q8, 9, 12, 13 Page 202 Q3, 5, 7
Speed, distance and time	Page 103 Q1, 3, 5, 8 Page 104 Q5 Page 106 Q5,6, 9, 10 Page 110 Q2,3,4,5
Money	Page 22 Q8,9 Page 23 Q4, 7, 8 Page 24 Q1,2 Page 25 Q3 Page 27 Q8 Page 29 Q7 Page 30 Q5, 7,8,11, 13,15
Number Work	Page 6 Q3, 4 Page 7 Q1 Page 8 Q4, 5 Page 9 Q1, 2, 6 Page 10 Q6, 7, 8, 9
Angle Properties	Page 11 Q2 Page 12 Q3(c), (d), (n), (o), Page 13 Q1, 3 Page 14 Q1, 2

S2 Level 4 – Pupil Information Sheet for Block 2

FRACTIONS, DECIMALS AND PERCENTAGES	MNU 4-07a	NS	OT	VG
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Find a percentage of a quantity without a calculator
 Find a percentage of a quantity with a calculator
 Convert between decimals, fractions and percentages
TJ 4+ Pages 15 - 18
L&L Level 4 Pages 54 - 61

POWERS, ROOTS & SCIENTIFIC NOTATION	MTH 4-06a,b	NS	OT	VG
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Squares, cubes and powers
 Square roots, cube roots and further roots
 Changing large numbers into Scientific notation and back into numbers
 Changing small numbers into Scientific notation and back into numbers
 Calculations with Scientific notation
TJ 4+ Pages 64 - 72
L&L Level 4 Pages 39 - 49

ALGEBRA 1	MTH 4-14a,b	NS	OT	VG
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Simplifying expressions by multiplying terms
 Simplifying expressions by removing brackets and collecting terms
 Factorising algebraic expressions by removing a common factor
TJ 4+ Pages 31 - 34
L&L Level 4 Pages 185 - 198

CIRCLES	MNU 3-11a MTH 3-11b	NS	OT	VG
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Calculating the circumference of a circle
 Calculating the diameter of a circle if given the circumference
 Calculating the area of a circle
 Calculating the radius of a circle if given the area
 Solving problems with area and perimeter of circles
TJ 4+ Pages 73 - 80
L&L Level 4 Pages 229 - 235

INFORMATION HANDLING	MTH 4-21a	NS	OT	VG
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Interpreting comparative bar charts and line graphs
 Interpreting and constructing pie charts
 Drawing scattergraphs and finding line of best fit
TJ 4+ Pages 195 - 199
L&L Level 4 Pages 301 – 305, 327 - 329

REVISION FOR S2 LEVEL 4 BLOCK 2 TEST

Topic	Questions from TJ Book 4+	
Fractions, decimals and percentages	Page 15 Q1, 6 Page 18 Q1, 2, 5, 8, 10	Page 16 Q1, 7, 8
Powers, roots and scientific notation	Page 66 Q2 Page 68 Q1,3	Page 67 Q5 Page 71 Q5, 6, 7, 12, 13
Algebra 1	Page 31 Q1, 2 Page 33 Q5	Page 32 Q1, 2, 3 Page 34 Ex 5.3 Q2,3
Circles	Page 73 Q2,4 Page 77 Q3, 4, 7	Page 74 Q7, 8, 11, 12 Page 80 Q1, 2, 4, 7, 9, 10
Information handling	Page 195 Q1,2,4 Page 197 Q1	Page 196 Q2, 5 Page 199 Q2, 3

S2 Level 4 – Pupil Information Sheet for Block 3

FRACTIONS	MTH 4-07b	NS	OT	VG
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Simplifying fractions
 Add and subtract fractions with the same denominator
 Add and subtract fractions with different denominators
 Multiplying and dividing fractions

TJ 4+ Pages 178 - 183
L&L Level 4 Pages 62 - 68

PYTHAGORAS' THEOREM	MTH 4-16a	NS	OT	VG
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Find the hypotenuse of a right-angled triangle
 Find a shorter side in a right-angled triangle
 Problem solving using Pythagoras' Theorem
 Calculate the distance between coordinate points

TJ 4+ Pages 91 - 100
L&L Level 4 Pages 208 - 215

ALGEBRA 2	MTH 4-15a	NS	OT	VG
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Solving equations up to and including brackets
 Solving equations with fractions
 Solving inequalities

TJ 4+ Pages 55 - 61
L&L Level 4 Pages 199 - 206

VOLUME AND SURFACE AREA	MNU 3-11a,b MTH 4-11b	NS	OT	VG
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Calculating the surface area of cubes and cuboids
 Calculating the volume of cubes and cuboids

TJ 4+ Pages 121 - 125
L&L Level 4 Pages 133 – 136

PROPORTION	MNU 4-08a	NS	OT	VG
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Sharing an amount in a given ratio
 Unitary Proportion
 Direct Proportion
 Linear graphs of direct proportion
 Indirect (Inverse) proportion

TJ 4+ Pages 111 - 117
L&L Level 3 Pages 69 - 77

REVISION FOR S2 LEVEL 4 BLOCK 3 TEST

Topic	Questions from TJ Book 4+	
Fractions	Page 181 Q2 Page 183 Q2, 4, 6	Page 182 Q4, 8 Page 184 Q4, 5, 6, 9
Pythagoras' Theorem	Page 94 Q4, 5, 6 Page 99 Q4, 5	Page 98 Q8, 9, 10 Page 100 Q1, 3, 4, 5
Algebra 2	Page 56 Q5, 6, 7, 10 Page 61 Q1, 3	Page 60 Q7
Volume and Surface Area	Page 122 Q1, 2, 3, 4, 6 Page 131 Q1, 2	Page 123 Q13, 14, 16, 17
Proportion	Page 111 Q2 Page 116 Q4, 5, 6	Page 113 Q2, 3, 4 Page 117 Q3, 4, 6, 8

S2 Level 4 – Pupil Information Sheet for Block 4

USING SIMPLE STATISTICS	MTH 4-20b	NS	OT	VG
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Calculating the mean, median, mode and range of a data set
 Calculating the mean, median, mode and range from a frequency table

TJ 4+ Pages 188 – 192, 194
L&L Level 4 Pages 307 – 312, 317 - 319

TOLERANCE	MNU 4-01a	NS	OT	VG
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Understanding the idea of tolerance in a real life situation
 Calculating max/min values using tolerance notation

TJ 4+ Pages 42 - 45
L&L Level 4 Pages 16 - 17

PATTERNS	MTH 4-13a	NS	OT	VG
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Identify linear patterns of the form $y = mx$
 Identify linear patterns of the form $y = mx + c$
 Identify non-linear patterns
 Investigate more complex patterns

TJ 4+ Pages 132 - 138
L&L Level 4 Pages 156 - 163

TRIGONOMETRY	MTH 4-16a	NS	OT	VG
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Identify the relationship between sides and angles in a R.A.T
 Using the Tangent ratio to find a side or an angle
 Using the Sine ratio to find a side or an angle
 Using the Cosine ratio to find a side or an angle
 Using the trig ratios to find the hypotenuse
 SOHCAHTOA – choosing the correct trig ratio

TJ 4+ Pages 150 - 165
L&L Level 4 Pages 217 - 226

PREPARATION FOR NATIONAL 4 AVU

Topic	Questions from TJ Book 4+
Fractions, decimals and percentages	Q1, 3, 4, 5, 8 on Page 18 Q3, 9 on Page 63 Q2, 7, 8 on Page 90 Q2, 7 on Page 149 Q2, 5 on Page 204
Algebra	Q2 on Page 32 Q1 on Page 61 Q5, 6, 7 on Page 134 Q19(a) – (e) on Page 205
Perimeter, Area, Volume	Q1, 2, 4, 5 on Page 80 Q6 on Page 88 Q1, 2 on Page 131 Q27, 28 on Page 206
Pythagoras and Trigonometry	Q1, 2, 3, 4 on Page 100 Q1, 2, 3 on Page 165 Q1, 2, 3 on Page 185 Q64, 65 on Page 210
Time, Distance and Speed	Q1, 2, 3, 4 on Page 110 Q10 on Page 148 Q33, 34, 35 on Page 206
Graphs, Statistics and Probability	Q1, 2, 3, 4 on Page 194 Q1, 2, 3 on Page 199 Q16, 17, 3, 4, 7 on Page 202 Q57, 59, 62 on Page 209

LINEAR RELATIONSHIPS	MTH 4-13b,c,d	NS	OT	VG
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Find the gradient of a slope

Find the gradient of a line between two points

Sketching straight lines from a table of values

Identify the equation of a straight line in the form $y = mx + c$

TJ 4+ Pages 16 - 53

L&L Level 4 Pages 164 – 167, 172 - 181