

Tables for determining National Curriculum Levels from MEP Year 9 Diagnostic Test Results (Express)

Diagnostic Test A

Level 5 : $15 \leq \text{Mark} < 29$	Level 6 : $29 \leq \text{Mark} < 36$	Level 7 : $\text{Mark} \geq 36$
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Diagnostic Test B

Level 6 : $11 \leq \text{Mark} < 26$	Level 7 : $26 \leq \text{Mark} < 41$	Level 8 : $\text{Mark} \geq 41$
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Diagnostic Test C

Level 6 : $19 \leq \text{Mark} < 34$	Level 7 : $34 \leq \text{Mark} < 41$	Level 8 : $\text{Mark} \geq 41$
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Diagnostic Test D

Level 6 : $18 \leq \text{Mark} < 36$	Level 7 : $\text{Mark} \geq 36$
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Diagnostic Test E

Level 6 : $14 \leq \text{Mark} < 39$	Level 7 : $\text{Mark} \geq 39$
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Diagnostic Test F

Level 7 : $17 \leq \text{Mark} < 25$	Level 8: $25 \leq \text{Mark} < 42$	Exceptional Performance : $\text{Mark} \geq 42$
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The remainder of this document details the National Curriculum attainment target and level for each question in each of the Year 9 Diagnostic Tests (Express Route).

Level 5 : 15 ≤ Mark < 29	Level 6 : 29 ≤ Mark < 36	Level 7 : Mark ≥ 36
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Chapter	Number	Question	Attainment Target	Level
1.1	1	Converting a binary number to base 10	-	-
1.1	2	Converting a base 10 number to binary	-	-
1.3	3	Multiplying with binary numbers	-	-
1.4	4	Converting from base 8 to base 10	-	-
1.4	5	Converting from base 10 to base 5	-	-
2.1	6	Multiplying decimals by 10 and 100	2	5
2.4	7	Multiplication problems	2	4
2.4	8	Long Multiplication and Division problems	2	5
2.4	9	Long Division and Multiplication problems	2	5
2.4	10	Problems involving weight and money	2	5
3.1	11	Working with positive indices	2	7
3.3	12	Working with negative indices	2	7
3.4	13	Writing a number in standard index form	2	8
3.5	14	Working with fractional powers	2	8

Attainment Target	Question	Level
Number & Algebra (2)	6,7,8,9,10,11,12,13,14	5,4,5,5,5,7,7,8,8
Shape, Space & Measure(3)		
Statistics (4)		
Non NC material	1,2,3,4,5	

Year 9

Diagnostic Test B

Summary of Levels

Level 6 : 11 ≤ Mark < 26	Level 7 : 26 ≤ Mark < 41	Level 8 : Mark ≥ 41
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Chapter	Number	Question	Attainment Target	Level
3.4	1	Working with numbers in standard index form	2	8
4.4	2	Working with percentages and ratios	2	6
	3	Problems involving rounding	2	7
4.3	4	Multiplying and dividing with fractions	2	7
5.2	5	Turning an equation into a straight line graph	2	6
	6	Solving an equation involving () 's	2	6
5.5	7	Solving equations with x on both sides Solving simultaneous equations	2	6/7
6.3	8	Working with probabilities for two events	4	8
6.4	9	Probabilities associated with throwing 3 dice	4	7/8

Attainment Target	Question	Level
Number & Algebra (2)	1,2,3,4,5,6,7	8,6,7,7,6,6,6/7
Shape, Space & Measure (3)		
Statistics (4)	8,9	8,7/8

Level 6 : 19 ≤ Mark < 34	Level 7 : 34 ≤ Mark < 41	Level 8 : Mark ≥ 41
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Chapter	Number	Question	Attainment Target	Level
5.6	1	Reading average heights for boys and girls from a graph	2	5
4.4	2	Working with proportions (%, Ratio, Probability) drawing information from a two way table	2/4	6
3.4	3	Calculations involving standard form	2	8
6.3	4	Probability of more than one event	4	8
7.4	5	Reflection in Horizontal, Vertical and diagonal mirror lines	3	5
7.6	6	Combining transformations	3	8
8.1	7	Combinations and Permutations	4	7
8.1	8	Working with unitary ratios to calculate population densities	4	6
8.1	9	Working with percentage pie charts	4	5
8.2	10	Reading information from a cumulative frequency curve (Median)	4	8
8.1	11	Interpreting information displayed in a percentage pie chart	4	7

Attainment Target	Question	Level
Number & Algebra (2)	1,2,3	5,6,8
Shape, Space & Measure (3)	5,6	5,8
Statistics (4)	2,4,7,8,9,10,11	6,8,7,6,5,8,7

Level 6 : 18 ≤ Mark < 36	Level 7 : Mark ≥ 36
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Chapter	Question Number	Question	Attainment Target	Level
6.3	1	The probability of throwing two dice	4	6
7.4	2	Transformation of shapes on a co-ordinate grid	3	6
9.4	3	The area and circumference of circles	3	6
9.4	4	The volume of a prism	3	6
10.1	5	Writing the nth term of a sequence and generating the terms of a sequence from an expression	2	6
10.2	6	Interpreting an expression	2	7
10.3	7	Substitution of positive numbers into expressions	2	7
11.1	8	Substitution and simplification of expressions	2	7
11.1	9	Adding algebraic fractions	2	7
11.2	10	Expanding two brackets and factorising algebraic expressions	2	8
12.3	11	Constructing a triangle and the loci of points around the triangle	3	6/7

Attainment Target	Question	Level
Number & Algebra (2)	5,6,7,8,9,10	6,7,7,7,7,8
Shape, Space & Measure (3)	2,3,4,11	6,6,6,6/7
Statistics (4)	1	6

Level 6 : 14 ≤ Mark < 39	Level 7 : Mark ≥ 39
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Chapter	Number	Question	Attainment Target	Level
8.1	1	Changing the angle in a pie chart to an amount	4	6
9.4	2	Calculating the cross sectional area of a prism and its depth given the volume	3	6
9.3	3	Using algebra in the context of the area and perimeter of a rectangle	2	6
9.3	4	Using the circumference of a circle to find the area of a circle	3	6
10.2/10.3	5	Finding the nth term of a sequence of match stick pictures	2	7
13.1	6	Solving an inequality	2	7
13.3	7	Drawing a cubic curve by substituting values of x into an equation	2	7
14.4	8	Maximum and Minimum area and percentage problems	2	7 *
14.4	9	Maximum and Minimum problems involving temperature	2	7 *

Attainment Target	Question	Level
Number & Algebra (2)	3,5,6,7,8,9	6,7,7,8,8,8
Shape, Space and Measure (3)	2,4,	6,6
Statistics (4)	1	6

*Both of these questions could be rated as Exceptional Performance as they involve identifying upper and lower bounds.

Level 7 : 17 ≤ Mark < 25	Level 8: 25 ≤ Mark < 42	Exceptional Performance : Mark ≥ 42
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Chapter	Number	Question	Attainment Target	Level
9.4	1	Finding the cross sectional area and depth of a prism given the volume	3	6
9.2	2	Calculating the maximum and minimum volume of a sphere	3	E
15.3	3	Using trigonometry to find the missing sides of a right angled triangle	3	8
15.4	4	Using trigonometry to find the missing angle in a right angled triangle	3	8
16.3	5	Drawing a cumulative frequency curve for a set of grouped data and finding the median, UQ and LQ	4	8
11.3	6	Solving a quadratic equation using factorisation	2	8
17.3	7	Solving a quadratic equation by completing the square	2	8
18.2	8	Discussion of the different types of samples, systematic, stratified, random	4	E

Attainment Target	Question	Level
Number & Algebra (2)	6,7	8,8
Shape, Space & Measure (3)	1,2,3,4	6,E,8,8
Statistics (4)	5,8	8,E