Tables for determining National Curriculum Levels from MEP Year 8 Diagnostic Test Results (Express)

Diagnostic Test A

Below Level 6 :	Level 6 :	Level 7 :
Mark < 21	21 ≤ Mark < 38	Mark ≥ 38

Diagnostic Test B

Below Level 6 :	Level 6 :	Level 7 :
Mark < 28	28 ≤ Mark < 43	Mark ≥ 43

Diagnostic Test C

Below Level 6 :	Level 6 :	Level 7 :
Mark < 26	26 ≤ Mark < 40	Mark ≥ 40

Diagnostic Test D

Level 5 :	Level 6 :	Level 7 :
10 ≤ Mark < 25	25 ≤ Mark < 41	Mark ≥ 41

Diagnostic Test E

Level 5 :	Level 6 :	Level 7 :
13 ≤ Mark < 30	30 ≤ Mark < 42	Mark ≥ 42

Diagnostic Test F

Below Level 6 :	Level 6 :	Level 7 :
Mark < 53	53 ≤ Mark < 83	Mark ≥ 83

The remainder of this document details the National Curriculum attainment target and level for each question in each of the Year 8 Diagnostic Tests (Express Route).

Year 8   Diagnostic Test A   Summary of Levels

Below Level 6 :	Level 6 :	Level 7 :
Mark < 21	21 ≤ Mark < 38	Mark ≥ 38

Chapter	Number	Question	Attainment Target	Level
1.4	1	Finding the shortest route on a Network	-	-
1.3	2	Inputting numbers in a function machine	2	6
2.2	3	Drawing a factor tree and writing a number as a product of its primes	2	6
2.4	4	Finding the Highest Common Factor	2	6
2.4	5	Finding the Lowest Common Multiple	2	6
2.3	6	Working with indices	2	8
3.5	7	Showing a triangle contains a right angle using Pythagoras	3	7
3.3	8	Calculating the perimeter of a triangle using Pythagoras	3	7
3.4	9	Solving problems with Pythagoras	3	7
4.5	10	Writing numbers to a set number of decimal places or significant figures	2	5/6
4.3	11	Putting ( ) 's into expressions to make them correct	2	6
4.6	12	Estimating the area of a rectangle	2/3	6
4.1	13	Money problems	2	5

Attainment Target	Questions	Levels
Number & Algebra 2	2,3,4,5,6,10,11,12,13	6,6,6,6,8,5/6,6,6,5
Shape, Space & Measure 3	7,8,9,12	7,7,7,6
Statistics 4		
Non NC material	1	

Year 8   Diagnostic Test B   Summary of Levels

Below Level 6 : Mark < 28	Level 6 : 28 ≤ Mark < 43	Level 7 : Mark ≥ 43

Chapter	Number	Question	Attainment Target	Level
2.2	1	Drawing factor trees and writing numbers as a product of their primes	2	6
3.4	2	Solving problems with Pythagoras	3	7
4.3	3	Putting brackets into expressions	2	6
4.5	4	Writing numbers to a set number of decimal places and significant figures	2	5/6
5.2	5	Calculating averages from a frequency table Angles in a pie chart	4	6
6.4	6	Drawing the net of a cuboid and calculating its surface area	3	6
6.2	7	Drawing a cuboid on Isometric paper	3	6
6.3	8	Drawing elevations and plans of prisms	3	6
7.1	9	Writing a ratio in the form $1:n$	2	5
7.4	10	Linear Conversion	2	5
7.3	11	Sharing an amount in a given ratio	2	6
7.2	12	Working with Scales	2	6
8.2	13	Solving Equations	2	6
8.3	14	Factorising	2	7
8.4	15	Expanding Brackets	2	7
8.1	16	Using algebra to find the missing side length of a triangle given the area and height	2/3	7

Attainment Target	Questions	Levels
Number & Algebra 2	1,3,4,9,10,11,12,13,14,15,16	6,6,5/6,5,5,6,6,6,7,7,7,
Shape, Space & Measure 3	2,6,7,8,16	7,6,6,6,7
Statistics 4	5	6

Year 8   Diagnostic Test C   Summary of Levels

Below Level 6 : Mark < 26	Level 6 : 26 ≤ Mark < 40	Level 7 : Mark ≥ 40

Chapter	Number	Question	Attainment Target	Level
2.2	1	Drawing a factor tree and writing a number as a product of its prime factors	2	6
5.2	2	Calculating averages from a frequency table Angles in pie charts	4	6
6.3	3	Drawing plans and elevations of solids	3	6
8.2	4	Solving equations	2	6
9.1	5	Dividing fractions	2	7
9.3	6	Writing a percentage as a fraction	2	5
9.3	7	Writing a fraction as a percentage	2	6
9.4	8	Finding a percentage of an amount	2	5
9.5	9	Reducing an amount by a given percentage	2	6
9.5	10	Increasing an amount by a given percentage	2	8
10.2	11	The probabilities associated with throwing a pair of dice	4	6
10.4	12	Completing a tree diagram for two outcomes	4	7
11.2	13	Angles around parallel lines	3	5/6
11.3	14	Angle turns	3	4
11.3	15	Measuring Bearings	3	6/7
11.4	16	Calculating Bearings	3	7

Attainment Target	Questions	Levels
Number & Algebra 2	1,4,5,6,7,8,9,10,	6,6,7,5,6,5,6,8
Shape, Space & Measure 3	3,13,14,15,16	6,5/6,4,6/7,7
Statistics 4	2,11,12	6,6,7

Level 5 :	Level 6 :	Level 7 :
10 ≤ Mark < 25	25 ≤ Mark < 41	Mark ≥ 41

Chapter	Number	Question	Attainment Target	Level
2.2	1	Writing a number as a product of its primes	2	6
9.1	2	Dividing fractions	2	7
9.1	3	Finding a fraction of an amount	2	6
9.4	4	Finding a percentage of an amount	2	5
10.2	5	Finding probabilities associated with throwing two dice	4	6
11.2	6	Calculating angles around parallel lines	3	6
12.1	7	Substituting values into a formula	2	7
12.2	8	Solving equations	2	6/7
12.6	9	Changing the subject of a formula	2	7
13.3	10	Working with rates of pay	2	5
13.2	11	Calculating journey times	3	4
13.2	12	Time of arrival	2	5
13.3	13	Working out the rate of pay	2	5
13.3	14	Time and Money problems	2	5
14.5	15	Finding the equation of a line	2	7
14.5	16	Plotting points and finding the equation of a line between two points	2/3	6/7

Attainment Target	Questions	Levels
Number & Algebra 2	1,2,3,4,7,8,9,10,12,13,14,15,16	6,7,6,5,7,6/7,7,5,5,5,5,7,6/7
Shape, Space & Measure 3	6,11,16	6,4,6/7
Statisitcs 4	5	6

Year 8   Diagnostic Test E   Summary of Levels

Level 5 :	**Level 6 :**	**Level 7 :**
13 ≤ Mark < 30	30 ≤ Mark < 42	Mark ≥ 42

Chapter	Number	Question	Attainment Target	Level
9.1	1	Dividing fraction	2	6
9.4	2	Finding a percentage of an amount	2	5
11.2	3	Angles around lines	3	6
12.3	4	Solving equations with x on both sides	2	6
13.3	5	Calculating the rate of pay	2	5
12.1	6	Substitution into a formula	2	7
14.4	7	Finding the equation of a line given two points on a graph	3	7
14.5	8	Finding the equation of a line given two points	3	7
15.3	9	Line and rotational symmetry	3	5
15.2	10	Finding the number of sides of a polygon	3	6
15.2	11	Interior and Exterior angles in polygons	3	6
15.3	12	Drawing shapes with rotational symmetry of order 2	3	5
16.3	13	Calculating the area and perimeter of a running track	3	6
16.6	14	Calculating the volume and surface area of a cylinder	3	7
17.2	15	Converting from one metric unit to another	3	5
17.2	16	Converting from one metric unit to another	3	5
17.4	17	Converting from Imperial to metric	3	5

Attainment Target	Questions	Levels
Number & Algebra 2	1,2,4,5,6	6,5,6,5,7
Shape, Space & Measure 3	3,7,8,9,10,11,12,13,14,15,16,17	6,7,7,5,6,6,5,6,7,5,5,5
Statistics 4		

Below Level 6 : Mark < 53	Level 6 : 53 ≤ Mark < 83	Level 7 : Mark ≥ 83

Chapter	Number	Question	Attainment Target	Level
19.1	1	Enlarging shapes by a scale factor of 1.5	3	6
19.2	2	Similar Shapes	3	7
19.3	3	Finding the scale factor of enlargement	3	7
5.1	4	Turning a frequency table into a vertical line graph and pie chart	4	4/6
1.2	5	Using a function machine	2	6
2.4	6	Finding the Highest Common Factor	2	6
2.2	7	Writing a number as a product of its primes	2	6
2.4	8	Finding the Lowest Common Multiple	2	6
3.2/3.3	9	Finding the missing side lengths using Pythagoras	3	7
4.3	10	Inserting ( )'s into an expression	2	6
4.5	11	Rounding numbers to a set number of decimal places and significant figures	2	5/6
5.2	12	Calculating averages from a frequency table	4	6
5.2	13	Problems with averages	4	6
6.5	14	Drawing the net of a triangular prism to find its surface area	3	6
7.3	15	Splitting an amount into a given ratio	2	6
7.2	16	Using map scales	2	5
8.2	17	Solving an equation	2	6
8.4	18	Expanding brackets	2	7
8.3	19	Factorising expressions	2	7
9.1	20	Calculating fractions and percentages of amounts	2	5
9.5	21	Reducing an amount by Percentage	2	8
10.2	22	Probabilities associated with throwing two dice	4	6
11.3	23	Finding the Bearing	3	6
11.2	24	Calculating angles around lines	3	6
12.3	25	Solving equations with x on both sides	2	6
12.6	26	Making x the subject of the formula	2	7
13.3	27	Time and money problems	2/3	5
14.4	28	Finding the equation of a line given two points drawn on a graph	2	7
15.3	29	Drawing a shape with rotational symmetry but no line symmetry	3	5
15.2	30	Calculating exterior and interior angles in polygons	3	6
16.4	31	Calculating the area and perimeter of a semi-circle	3	6
18.2	32	Speed Distance problems	3	7

Attainment Target	Questions	Levels
Number & Algebra 2	5,6,7,8,10,11,15,16,17,18,19,20,21,25,26,27,28	6,6,6,6,6,5/6,6,5,6,7,7,5,8,6,7,5,7
Shape, Space & Measure 3	1,2,3,9,14,23,24,27,29,30,31	6,7,7,7,6,6,6,5,5,6,6,7
Handling Data 4	4,12,13,22	6,6,6,6