# Tables for determining National Curriculum Levels from MEP Year 7 Diagnostic Test results (Academic) 

## Diagnostic Test A

| Below Level 4: | Level 4: | Level 5 : |
| :--- | :--- | :--- |
| Mark $<21$ | $21 \leq$ Mark $<40$ | Mark $\geq 40$ |

Diagnostic Test B

| Below Level 4: | Level 4: | Level 5 : |
| :--- | :--- | :--- |
| Mark $<13$ | $13 \leq$ Mark < 36 | Mark $\geq 36$ |

Diagnostic Test C

| Level 4: | Level 5: |
| :--- | :--- |
| $16 \leq$ Mark $<38$ | Mark $\geq 38$ |

Diagnostic Test D

| Level 4: | Level 5 : |
| :--- | :--- |
| $14 \leq$ Mark $<36$ | Mark $\geq 36$ |

## Diagnostic Test E

| Level 4: | Level 5: |
| :--- | :--- |
| $12 \leq$ Mark $<36$ | Mark $\geq 36$ |

## Diagnostic Test F

| Level 4 : | Level 5: | Level 6 : |
| :--- | :--- | :--- |
| $18 \leq$ Mark $<61$ | $61 \leq$ Mark $<86$ | Mark $\geq 86$ |

The remainder of this document details the National Curriculum attainment target and level for each question in each of the Year 7 Diagnostic Tests (Academic Route).

| Below Level 4: | Level 4: | Level 5 : |
| :--- | :--- | :--- |
| Mark $<21$ | $21 \leq$ Mark < 40 | Mark $\geq 40$ |


| Chapter | Number | Question | Attainment Target | Level |
| :---: | :---: | :--- | :---: | :---: |
| 1.1 | 1 | Completing Logic Puzzles | - | - |
| 1.3 | 2 | Sets and Venn Diagrams to sort information | 4 | 4 |
| 2.1 | 3 | Writing whole numbers to the nearest 10 <br> and 100 | 2 | 3 |
| 2.1 | 4 | What is the value of the digit in | 2 | 3 |
| 2.1 | 5 | Writing numbers to 1 or 2 decimal places | 2 | 5 |
| 2.2 | 6 | Ordering numbers and decimals | 2 | 4 |
| 2.1 | 7 | Writing the smallest number which will <br> round up to ... | 2 | 4 |
| 2.1 | 8 | Using an inequality sign | 2 | 4 |
| 3.1 | 9 | Reading information from a scatter graph | 4 | 5 |
| 3.4 | 10 | Plotting points in 4 quadrants | 3 | 5 |
| 4.1 | 11 | Adding and subtracting whole numbers | 2 | 3 |
| 4.2 | 12 | Solving problems in context | 2 | 4 |
| 4.1 | 13 | Adding and Subtracting Decimals | 2 | 4 |
| 4.2 | 14 | Solving money problems in context | 2 | 3 |
| 5.1 | 15 | Using a compass | 3 | 5 |
| 5.2 | 16 | Measuring angles with a protractor | 3 | 4 |
| 5.1 | 17 | Writing turns in terms of angles | 3 | 4 |
| 5.1 | 18 | Angles and compass directions | 3 | 5 |
| 5.4 | 19 | Calculating angles on lines, around points <br> and in triangles |  |  |
| 5.5 |  |  |  |  |


| Attainment Target | Questions | Levels |
| :--- | :--- | :--- |
| Number \& Algebra 2 | $3,4,5,6,7,8,11,12,13,14$ | $3,3,5,4,4,4,3,4,4,4$ |
| Shape, Space and Measure 3 | $10,15,16,17,18,19$ | $5,3,5,4,4,5$ |
| Statistics 4 | 2,9 | 4,5 |
| Non NC material | 1 | N/A |


| Below Level 4: | Level 4: | Level 5 : |
| :--- | :--- | :--- |
| Mark $<13$ | $13 \leq$ Mark < 36 | Mark $\geq 36$ |


| Chapter | Number | Question | Attainment Target | Level |
| :---: | :---: | :---: | :---: | :---: |
| 3.4 | 1 | Plotting points in 4 quadrants | 3 | 5 |
| 5.1 | 2 | Using a compass | 3 | 4 |
| $\begin{aligned} & \hline 5.4 \\ & 5.5 \\ & \hline \end{aligned}$ | 3 | Calculating angles on lines, around points and in triangles | 3 | 5 |
| 6.2 | 4 | Multiplying whole numbers and decimals by 10,100 | 2 | 4 |
| 6.4 | 5 | Solving time/distance problems involving multiplication | 2 | 4 |
| 6.3 | 6 | Multiplying whole numbers and decimals | 2 | 5 |
| 6.4 | 7 | Solving money problems involving multiplication | 2 | 4 |
| 7.2 | 8 | Finding the next two numbers in a number sequence | 2 | 4 |
| 7.3 | 9 | Finding the output with a number machine | 2 | 4 |
| 7.4 | 10 | Using the nth term to generate the first 4 terms of a sequence | 2 | 5 |
| 7.4 | 10 | Finding the nth term of a sequence | 2 | 6 |
| 8.1 | 11 | Putting brackets into a statement to make it true | 2 | 5 |
| 8.2 | 12 | Dividing using short division | 2 | 5 |
| 8.3 | 13,14 | Solving division problems in context | 2 | 4/5 |
| 9.2 | 15 | Finding the area and perimeter of squares and rectangles | 3 | 5 |
| 9.5 | 16 | Finding the area of a triangle |  | 6 |
| 9.3 | 17 | Converting from one metric unit to another | 2 | 5 |


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


| Level 4: | Level 5: |
| :--- | :--- |

$16 \leq$ Mark < 38
Mark $\geq 38$

| Chapter | Number | Question | Attainment Target | Level |
| :---: | :---: | :--- | :---: | :---: |
| 10.1 | 1 | Finding the fraction of the shape shaded | 2 | 4 |
| 10.1 | 2 | Shading a fraction of a shape | 2 | 4 |
| 10.1 | 3 | Finding the fraction remaining | 2 | 4 |
| 10.2 | 4 | Writing one fraction equivalent to another | 2 | 4 |
| 10.3 | 5 | Finding a fraction of an amount | 2 | 5 |
| 10.3 | 6,7 | Finding a fraction of an amount | 2 | 5 |
| 10.4 | 8 | Changing an improper fraction to a mixed <br> number and back | 2 | 5 |
| 3.3 | 9 | Working with inequality signs | 2 | 4 |
| 11.1 | 10 | Distinguishing between Qualitative and <br> Quantitative data | 4 | 5 |
| 11.2 | 11 | Completing a frequency tally chart and graph | 4 | $3 / 4 / 6$ |
| 12.1 | 12 | Calculations involving the 4 operations | 2 | $3 / 4 / 5$ |
| 12.2 | 13 | Division problems in context | 2 | 4 |
| 12.2 | 14 | Subtraction problem in context | 2 | 5 |
| 12.2 | 15 | Division problems in context | 2 | 4 |
| 3.4 | 16 | Plotting co-ordinates in 4 quadrants | 3 | 5 |
| $5.4 / 5.6$ | 17 | Finding the missing angles around points and <br> in triangles | 2 | 4 |
| 13.2 | 18 | Finding the next two terms in a linear sequence | 3 | 5 |
| 9.4 | 19 | Calculating the area and perimeter of <br> compound shapes | 3 | 5 |
| 9.2 | 20 | Metric Conversion |  |  |


| Attainment Target | Questions | Levels |
| :--- | :--- | :--- |
| Number \& Algebra 2 | $1,2,3,4,5,6,7,8,9,12,13,14,15,18$ | $4,4,4,4,5,5,5,5,4,3 / 4 / 5,4,5,4,4$ |
| Shape, Space \& Measure 3 | $16,17,19,20$ | $5,5,5,5$ |
| Statistics 4 | 10,11 | $5,3 / 4 / 6$ |


| Level 4: | Level 5: |
| :--- | :--- |
| $14<$ Mark < 36 | Mark $>36$ |


| Chapter | Number | Question | Attainment Target | Level |
| :---: | :---: | :---: | :---: | :---: |
| 13.1 | 1 | Drawing the next two shapes in a pattern | 2 | 4 |
| 13.2 | 2 | Finding the $5^{\text {th }}, 6^{\text {th }}$ and $10^{\text {th }}$ triangular number | 2 | 4 |
| 13.2 | 3 | Finding the next 2 terms in a sequence | 2 | 5 |
| 14.1 | 4 | Writing clock times in digits and words | 3 | 3 |
| 14.2 | 5 | Writing times in the 24 hour clock | 3 | 3 |
| 14.2 | 6 | Converting 24 hour clock to 12 hour clock | 3 | 3 |
| 14.4 | 7 | Reading and interpreting a train timetable | 3 | 3 |
| 15.1/15.2 | 8 | The four operations with positive and negative numbers | 2 | 5 |
| 16.1 | 9 | Filling missing numbers in calculations | 2 | 5 |
| 13.2 | 10 | Finding the next 2 terms in a sequence | 2 | 5 |
| 16.1 | 11 | Substituting positive and negative numbers into an algebraic expression | 2 | 5 |
| 16.1 | 12 | Simplifying algebraic expressions | 2 | 5 |
| 7.3 | 13 | Finding the input and output of a function machine | 2 | 4/5 |
| 16.3 | 14 | Solving equations | 2 | 6 |
| 10.3 | 15 | Finding fractions of amounts | 2 | 5 |
| 10.3 | 16 | Finding the fraction remaining | 2 | 5 |
| 8.2 | 17 | Calculations with decimals | 2 | 5 |
| 12.2 | 18 | Solving money problems | 2 | 5 |
| 9.4 | 19 | Calculating the area and perimeter of a compound shape | 3 | 5 |


| Attainment Target | Questions | Levels |
| :--- | :--- | :--- |
| Number \& Algebra 2 | $1,2,3,8,9,10,11,12,13,14,15,16,17,18$ | $4,4,5,5,5,5,5,5,4 / 5,6,5,5,5,5$ |
| Shape, Space \& Measure 3 | $4,5,6,7,19$ | $3,3,3,3,5$ |
| Statistics 4 |  |  |


| Level 4: | Level 5: |
| :--- | :--- |

$12 \leq$ Mark < 36
Mark $\geq 36$

| Chapter | Number | Question | Attainment Target | Level |
| :---: | :---: | :--- | :---: | :---: |
| 17.2 | 1 | Finding the \% shaded on a square | 3 | 4 |
| 17.1 | 2 | Converting decimals to fractions | 2 | 5 |
| 17.1 | 3 | Writing a fraction as a decimal | 2 | 5 |
| 17.3 | 4 | Writing a percentage as a fraction | 2 | 5 |
| 17.2 | 5 | Finding a percentage of an amount | 2 | 5 |
| 18.2 | 6 | Calculating measures of central tendency and <br> spread | 4 | 5 |
| 18.1 | 7 | Completing a frequency tally chart and turning it <br> into a vertical line graph | 4 | 4 |
| 2.1 | 8 | Calculating the upper and lower bounds | 2 | 4 |
| 19.2 | 9 | Finding the actual area from a scale drawing | 3 | 5 |
| 19.1 | 10 | Using map scales | 3 | 5 |
| 4.1 | 11 | Calculations involving decimals | 2 | 5 |
| 20.2 | 12 | The four operations with fractions | 2 | 5 |
| 10.3 | 13 | Finding the fraction remaining | 2 | 4 |
| 7.2 | 14 | Finding the next two terms in a sequence | 2 | 5 |
| 14.2 | 15 | Writing times in 24 hour clock | 3 | 3 |
| 14.2 | 16 | Writing times in 12 hour clock | 2 | 3 |
| 16.1 | 17 | Substitution into an algebraic expression | 2 | 5 |
| 16.1 | 18 | Simplifying expressions | 2 | 5 |
| 16.3 | 19 | Solving equations with x on one side | 2 | 6 |
| 10.3 | 20 | Finding the fraction remaining | 4 |  |


| Attainment Target | Questions | Levels |
| :--- | :--- | :--- |
| Number 2 | $2,3,4,5,8,11,12,13,14,17,18,19,20$ | $5,5,5,5,4,5,5,4,5,5,5,6,4$ |
| Shape 3 | $1,9,10,15,16$ | $4,5,5,3,3$ |
| Handling Data 4 | 6,7 | 5,4 |


| Level 4: | Level 5: | Level 6: |
| :--- | :--- | :--- |
| $18 \leq$ Mark $<61$ | $61 \leq$ Mark $<86$ | Mark $\geq 86$ |


| Chapter | Number | Question | Attainment Target | Level |
| :---: | :---: | :---: | :---: | :---: |
| 21.1 | 1 | Describing the probability of an event | 4 | 4 |
| 21.1 | 2 | Marking an event on a probability scale | 4 | 5 |
| 21.2 | 3 | The probability of "not" | 4 | 6 |
| 21.3 | 4 | Determining the expected frequency | 4 | 5 |
| 22.2 | 5 | Calculating the volume of a cube | 3 | 6 |
| 22.4 | 6 | Calculating the volume of a prism | 3 | 6 |
| 2.2 | 7 | Writing decimals to 1 and 2 decimal places | 2 | 5 |
| 3.4 | 8 | Plotting co-ordinates in 4 quadrants | 3 | 5 |
| 5.5 | 9 | Constructing triangles | 3 | 5 |
| 12.1 | 10 | Addition and subtraction with whole numbers and decimals | 2 | 3/4 |
| 8.1 | 11 | Multiplying decimals by $10,100,1000$ | 2 | 3/5 |
| 7.2 | 12 | Finding the next two terms in a sequence | 2 | 4/5 |
| 8.3 | 13 | Division with decimals | 2 | 4/5 |
| 12.2 | 14 | Money problems | 2 | 5 |
| 9.4 | 15 | Calculating the area and perimeter of a compound shape | 3 | 5 |
| 9.3 | 16 | Metric conversions | 3 | 5 |
| 10.1 | 17 | Finding the fraction, \% decimal of a shaded shape | 2 | 4 |
| 10.1 | 18 | Shading a fraction of a shape | 3 | 4 |
| 10.2 | 19 | Writing equivalent fractions | 2 | 5 |
| 10.3 | 20 | Finding fractions of amounts | 2 | 5 |
| 11.2 | 21 | Drawing a frequency tally chart and vertical line graph | 4 | 3/4/6 |
| 13.1 | 22 | Drawing the next shape in a sequence and writing a rule for the nth shape | 2 | 5/7 |
| 14.2 | 23 | Changing 12 to 24 hour clock | 3 | 3 |
| 14.2 | 24 | Changing 24 to 12 hour clock | 3 | 3 |
| 15.1 | 25 | Calculations with positive and negative numbers | 2 | 5/6 |
| 16.1 | 26 | Substitution into a formula | 2 | 5 |
| 16.1 | 27 | Simplifying algebraic expressions | 2 | 5 |
| 16.3 | 28 | Solving equations with x on one side | 2 | 5/6 |
| 17.1 | 29 | Converting decimals to fractions | 2 | 5 |
| 17.3 | 30 | Writing a \% as a fraction in its simplest form | 2 | 5 |
| 17.2 | 31 | Calculating \% of amounts | 2 | 5 |
| 18.2 | 32 | Calculating measures of central tendency and spread | 4 | 5 |
| 19.2 | 33 | Working with Map Scales | 3 | 5 |
| 20.2/20.3 | 34 | Calculations with fractions | 2 | 5 |


| Attainment Target | Questions | Levels |
| :--- | :--- | :--- |
| Number \& Algebra 2 | $7,10,11,12,13,14,17,19,20,22,25,26,27,28$, | $5,3 / 4,3 / 5,4 / 5,4 / 5,5,4,5,5,5 / 7,5 / 6,5,5$, |
|  | $29,30,31,34$, | $5 / 6,5,5,5,5$ |
| Shape, Space \& Measure 3 | $5,6,8,9,15,16,18,23,24,33$ | $5,6,5,5,5,5,4,3,3,5$ |
| Statistics 4 | $1,2,3,4,21,32$ | $4,5,6,5,3 / 4 / 6,5$ |

