

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

Diagnostic Test A

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|------------------------------------------------|------------------------------------------------|-------------------------------------------|
| Level 5 : $15 \leq \text{Mark} < 30$ | Level 6 : $30 \leq \text{Mark} < 41$ | Level 7 : $\text{Mark} \geq 41$ |
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Diagnostic Test B

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|------------------------------------------------|------------------------------------------------|-------------------------------------------|
| Level 5 : $11 \leq \text{Mark} < 30$ | Level 6 : $30 \leq \text{Mark} < 42$ | Level 7 : $\text{Mark} \geq 42$ |
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Diagnostic Test C

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| Level 5 : $23 \leq \text{Mark} < 38$ | Level 6 : $\text{Mark} \geq 38$ |
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Diagnostic Test D

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|----------------------------------------------|------------------------------------------------|-------------------------------------------|
| Below Level 6 : $\text{Mark} < 25$ | Level 6 : $25 \leq \text{Mark} < 42$ | Level 7 : $\text{Mark} \geq 42$ |
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Diagnostic Test E

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| Level 6 : $20 \leq \text{Mark} < 40$ | Level 7 : $\text{Mark} \geq 40$ |
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Diagnostic Test F

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|------------------------------------------------|------------------------------------------------|-------------------------------------------|
| Level 6 : $18 \leq \text{Mark} < 32$ | Level 7 : $32 \leq \text{Mark} < 43$ | Level 8 : $\text{Mark} \geq 43$ |
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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 (Academic Route).

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| Level 5 : 15 ≤ Mark < 30 | Level 6 : 30 ≤ Mark < 41 | Level 7 : Mark ≥ 41 |
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| Chapter | Question Number | Question | Attainment Target | Level |
|---------|-----------------|------------------------------------------------------|-------------------|-------|
| 1.1 | 1 | Converting binary numbers to base 10 | - | - |
| 1.1 | 2 | Converting base 10 numbers to binary | - | - |
| 1.3 | 3 | Binary multiplication | - | - |
| 2.3 | 4 | Interchanging numbers and operations in calculations | 2 | 4 |
| 2.3 | 5 | Multiplying by 10 and 100 | 2 | 5 |
| 2.4 | 6 | Proportion problems | 2 | 4 |
| 2.4 | 7 | Long multiplication and unitary problems | 2 | 5 |
| 2.4 | 8 | Long multiplication and unitary problems | 2 | 5 |
| 3.1 | 9 | Calculating with powers | 2 | 7 |
| 3.2 | 10 | Working with positive powers | 2 | 7 |
| 3.3 | 11 | Working with negative powers | 2 | 7 |

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

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| Level 5 : 11 ≤ Mark < 30 | Level 6 : 30 ≤ Mark < 42 | Level 7 : Mark ≥ 42 |
|------------------------------------|------------------------------------|-------------------------------|

| Chapter | Number | Question | Attainment Target | Level |
|---------|--------|-------------------------------------------------|-------------------|-------|
| 2.4 | 1 | Areas of rectangles | 2/3 | 5 |
| 3.2 | 2 | Working with powers | 2 | 7 |
| 3.4 | 3 | Working with standard form | 2 | 8 |
| 4.3 | 4 | Adding fractions | 2 | 5 |
| 4.2 | 5 | Finding a fraction of an amount | 2 | 5 |
| 4.4 | 6 | Identifying fractions and percentages on a line | 2 | 5 |
| 4.5 | 7 | % and ratio problems | 2 | 6 |
| 5.1 | 8 | Co-ordinates and scale factors of enlargement | 2/3 | 4/6 |
| 5.2 | 9 | Drawing straight line graphs | 3 | 6 |
| 5.3 | 10 | Solving equations | 2 | 6 |
| 5.4 | 11 | Properties of equations of lines | 3 | 6 |
| 6.3 | 12 | Probability of two events (Spinners) | 4 | 6 |
| 6.3 | 13 | Probability of two events (Number cards) | 4 | 6 |
| 6.3 | 14 | Probability problems “and” “or” | 4 | 8 |

| Attainment Target | Question | Level |
|---------------------|--------------------|-------------------|
| Number (2) | 1,2,3,4,5,6,7,8,10 | 5,7,8,5,5,5,6,4,6 |
| Shape and Space (3) | 1,8,9,11 | 5,6,6,6 |
| Handling Data (4) | 12,13,14 | 6,6,8 |

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| Level 5 : 23 ≤ Mark < 38 | Level 6 : Mark ≥ 38 |
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| Chapter | Number | Question | Attainment Target | Level |
|---------|--------|---------------------------------------------------------------------------------|-------------------|-------|
| | 1 | Conversion graphs | 2 | 5 |
| | 2 | Conversion graphs and substitution of values into a formula | 2 | 5 |
| 6.3 | 3 | Probability of two events "or" | 4 | 6 |
| 4.5 | 4 | Calculating ratios percentages and probabilities from a two way table | 2/4 | 6 |
| 7.4 | 5 | Lines of symmetry | 3 | 4 |
| 7.6 | 6 | Tessellations, lines of symmetry and rotational symmetry | 3 | 5 |
| 7.4 | 7 | Lines of symmetry | 3 | 5 |
| 8.1 | 8 | Reading and interpreting information from a table | 4 | 5 |
| 8.1 | 9 | Calculating a unitary amount from population and area data displayed in a table | 2 | 6 |
| 8.1 | 10 | Reading information from pie charts | 4 | 5 |
| 16.1 | 11 | Reading information from a cumulative frequency curve (Median) | 4 | 8 |

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

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| Below Level 6 : Mark < 25 | Level 6 : 25 ≤ Mark < 42 | Level 7 : Mark ≥ 42 |
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| Chapter | Number | Question | Attainment Target | Level |
|----------|--------|------------------------------------------------------------|-------------------|-------|
| 8.4 | 1 | Converting from one currency to another | 2 | 5 |
| 6.1 | 2 | Simple probability problems | 4 | 6 |
| 9.1/11.2 | 3 | Area and perimeter of a rectangle (Number/algebra qns) | 3 | 5/6 |
| 9.2 | 4 | Finding the area and circumference of a circle | 3 | 6 |
| 10.2 | 5 | Finding the nth shape in a sequence | 3 | 5/6 |
| 10.1 | 6 | Finding the nth term / using a rule to generate a sequence | 2 | 6 |
| 10.3 | 7 | Finding the nth term in a non-linear sequence | 2 | 7 |
| 13.2 | 8 | Working with squares, square roots and reciprocals | 2 | 7 |
| 11.1 | 9 | Substitution and simplification of formulae | 2 | 7 |
| 11.2 | 10 | Adding algebraic fractions | 2 | 7 |
| 12.3 | 11 | Constructing triangle/markings locus of points outside tri | 3 | 6/7 |

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

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| Level 6 : 20 ≤ Mark < 40 | Level 7 : Mark ≥ 40 |
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| Chapter | Number | Question | Attainment Target | Level |
|----------|--------|---------------------------------------------------------------------------------|-------------------|-------|
| 8.1 | 1 | Interpreting a population pie chart | 4 | 6 |
| 9.1 | 2 | Finding the area and perimeter of a rectangle | 2 | 6 |
| 9.1/11.2 | 3 | Area and perimeter of rectangles with algebraic dimensions | 2 | 6 |
| 9.2 | 4 | Finding the area of a circle given its circumference | 3 | 6 |
| 10.3 | 5 | Finding the nth shape in a non-linear sequence | 3 | 7 |
| 13.1 | 6 | Solving inequalities | 2 | 7 |
| 9.1/13.1 | 7 | Writing an expression for the perimeter of a triangle and solving an inequality | 2 | 7 |
| 13.4 | 8 | Drawing a cubic graph | 3 | 7 |
| 14.4 | 9 | Rounding: finding the maximum and minimum amounts | 2 | 6/7 |

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

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|------------------------------------|------------------------------------|-------------------------------|
| Level 6 : 18 ≤ Mark < 32 | Level 7 : 32 ≤ Mark < 43 | Level 8 : Mark ≥ 43 |
|------------------------------------|------------------------------------|-------------------------------|

| Chapter | Number | Question | Attainment Target | Level |
|---------|--------|------------------------------------------------------------------------|-------------------|-------|
| 9.2 | 1 | Calculating the area of triangles, quadrilaterals and circles | 3 | 6 |
| 10.1 | 2 | Finding the nth shape in the sequence | 2 | 6 |
| 15.1 | 3 | Calculating the perimeter of a trapezium (Pythagoras) | 3 | 7 |
| 15.3 | 4 | Finding the missing side length using trigonometry | 3 | 7 |
| 15.4 | 5 | Finding the missing angle using trigonometry | 3 | 8 |
| 16.1 | 6 | Drawing a vertical line graph and calculating the mode, mean and range | 4 | 5 |
| 17.1 | 7 | Drawing a quadratic curve and a line given their equations | 2 | 7/EP |

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