

## Curriculum Sequencing Overview – Maths Year 8

| Unit 3                          |   |   |                              |  |   |   |   |                              |
|---------------------------------|---|---|------------------------------|--|---|---|---|------------------------------|
| Week                            | 1   | 2   | 3                            | 4  | 5   | 6   | 7   | 8                            |
| <b>Date wb</b>                  | 23/01/23  | 30/01/23  | 06/02/23                     | 20/02/23   | 27/02/23  | 06/03/23                                      | 13/03/23  | 20/03/23                     |
| <b>Key dates</b>                | Unit 2 KA data due  | Year 8 mid-year data due  |                              |  |   |   |   |                              |
| <b>Big ideas (key concepts)</b> | Plotting and interpreting graphs  |   |                              | Introduction to probability  |   | Revision, assessment and feedback             | Circles and compound area   |                              |
| <b>Lesson topics sequence</b>   | Link horizontal and vertical lines to their equations<br>Understand simple diagonal line graphs and the relationships they show<br>Plot a given diagonal graph by completing a table of values<br>Identify the y -intercept of a diagonal graph, linking the graph to the equation<br>Calculate the gradient of a given diagonal graph<br>Identify straight line relationships in the form $y = mx + c$ making links between the equation and the graph<br>Plot two linear graphs and use their points on intersection to solve an equation<br>Plot graphs of simple quadratic relationships by completing a table of values<br>Identify families of quadratic graphs and compare graphs and equations of different lines using intercept and gradient<br>Plot both linear and quadratic graphs in order to solve quadratic equations |   |                              | Use inequality symbols to compare values less than one<br>Describe the probability of an event in words<br>Describe the probability of an event as a number<br>Calculate expectation based on probability values<br>Calculate a relative frequency as a probability based upon data<br>Calculate using 'sum' and 'not' rules of probability<br>Calculate using the 'or' rule for mutually exclusive events |   |   | Identify all key parts of a circle<br>Know and use the formula for the circumference of a circle<br>Know and use the formula for the area of a parallelogram<br>Derive and use the formula for area of a circle<br>Solve problems involving the areas of circles<br>Work backwards from area or circumference to find radius and diameter<br>Calculate areas involving compound shapes including where circular areas must be subtracted.<br>Calculate arc length and sector area of fractions of circles |                              |
| <b>Key assessments</b>          |   |   |                              |  |   | End of unit assessment                        |   | Unit 3 KA                    |
| <b>Homework</b>                 | 1-page self-quizzing, unit 3<br>Co-ordinates and graphs 1 – 7   | 1-page self-quizzing, unit 3<br>Linear and quadratic graphs 1 – 5 | 1-page self-quizzing, unit 3 | 1-page self-quizzing, unit 3<br>Introducing probability 8 – 14   | 1-page self-quizzing, unit 3<br>Compound area 1 – 4 | 1-page self-quizzing, unit 3<br>Circles 1 – 5 | 1-page self-quizzing, unit 3<br>Circles 6 - 12  | 1-page self-quizzing, unit 3 |



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|  | Hegarty task<br>205 | Hegarty task<br>208 | Introducing<br>probability 1<br>– 7<br>Hegarty task<br>251 | Hegarty task<br>351 | Hegarty task<br>353 | Hegarty task<br>358 | Hegarty task<br>539 | Linear and<br>quadratic<br>graphs 1 – 5<br>Hegarty task<br>541 |
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