## Year 11 Higher Tier Maths

| What concepts will we be covering this half term? |  | What resources can you use to support your learning? |
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| Unit 13: More Trigonometry | Understand and use upper and lower bounds in calculations <br> involving trigonometry. | Resources |
| 13.1 Accuracy | Understand how to find the sine of any angle. <br> Know the graph of the sine function and use it to solve <br> equations. | $\underline{\text { Corbett Maths 338, 339, 340 Trigonometric Graphs }}$ |
| 13.2 Graph of the sine function | Understand how to find the cosine of any angle. <br> Know the graph of the cosine function and use it to solve <br> equations. | Understand how to find the tangent of any angle. <br> Know the graph of the tangent function and use it to solve <br> equations. |
| 13.3 Graph of the cosine function | Find the area of a triangle and a segment of a circle. |  |
| 13.4 The tangent function | Use the sine rule to solve 2D problems. | Corbett Maths 337 Trigonometry Area of Triangles |
| 13.5 Calculating areas and the sine rule | Corbett Maths 333, 334 Sine Rule <br> Oak Academy Advanced Trig 1 |  |
| 13.6 The cosine rule and 2D trigonometric <br> problems | Use the cosine rule to solve 2D problems. <br> Solve bearings problems using trigonometry. | Corbett Maths 335, 336 Cosine Rule <br> Oak Academy Trigonometry 3 |
| 13.9 Transforming trigonometric graphs 2 Solving problems in 3D | Recognise how changes in a function affect trigonometric <br> graphs. | Corbett Maths 259 3D Pythagoras <br> Corbett Maths 332 3D Trigonometry |
| 13.8 Transforming trigonometric graphs 1 | Recognise how changes in a function affect trigonometric <br> graphs. <br> Use trigonometry in 3D. | Corbett Maths 323, 324 Transforming Trig Graphs |


| Unit 15: Equations and Graphs |  | Resources |
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| 15.1 Solving simultaneous equations <br> graphically | Represent inequalities on graphs. <br> Interpret graphs of inequalities. | $\underline{\text { Corbett Maths Simultaneous Equations (Graphs) }}$ |
| 15.2 Representing inequalities graphically | Recognise and draw quadratic functions. | Corbett Maths 180 Inequalities 1 <br> Corbett Maths 181, 182 Graphical Inequalities 2 |
| 15.3 Graphs of quadratic functions | Corbett Maths 264 Drawing Quadratics <br> Corbett Maths 267c Solving Quadratics Graphically |  |
| 15.4 Solving quadratic equations graphically | Find approximate solutions to quadratic equations graphically. | Solve quadratic equations using an iterative process. |

## Tasks to complete so we can assess your understanding/ Key Performance Indicator tasks

Complete MathsWatch homework assignments set by your maths teacher. https://vle.mathswatch.co.uk/vle/

## What can you do if you need help/ support?

Email your maths teacher, or one of the maths department lead teachers:
Mrs J Cooke (Head of Department): JCooke@netherthorpe.derbyshire.sch.uk
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