

## **KS4 Learning Overview**

## Maths (Foundation Tier)

## Exam Board: Edexcel

| Year 11  |                                                                                                                                                            |                                                                                                                                                                                                       |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Term     | Topics                                                                                                                                                     | Extra learning opportunities                                                                                                                                                                          |
| Autumn 1 | <ul> <li>Quadratic equations: Expanding &amp; factorising</li> <li>Quadratic equations: Graphs</li> <li>Circles, cylinders, cones &amp; spheres</li> </ul> | <b>Research task:</b><br>If the circumference of a circle is directly<br>proportional to the diameter, what is the constant<br>of proportionality? Who were the first people to<br>use this constant? |
| Autumn 2 | <ul> <li>Fractions &amp; reciprocals</li> <li>Indices &amp; standard form</li> </ul>                                                                       | Research task:Find the following distances in metres and reportthem using standard form:-Earth to the sun-Earth to Voyager 1-Earth to Proxima Centauri                                                |
| Spring 1 | <ul><li>Similarity &amp; congruence in 2D</li><li>Vectors</li></ul>                                                                                        |                                                                                                                                                                                                       |
| Spring 2 | <ul> <li>Rearranging equations, cubic &amp; reciprocal graphs, simultaneous equations</li> </ul>                                                           | <b>Research task:</b><br>What is the meaning of the term 'reciprocal'? How<br>do you find the reciprocal of a given number?                                                                           |
| Summer 1 | REVISION                                                                                                                                                   |                                                                                                                                                                                                       |
| Summer 2 | REVISION                                                                                                                                                   |                                                                                                                                                                                                       |