## S4 COURSE PLAN NATIONAL 4 ROUTE

|  | Patterns and Relationships | Number patterns/sequences | Revisit number sequences and explain the term 'nth' term |
| :---: | :---: | :---: | :---: |
|  |  |  | Write equation to represent sequence in relation to its position in the sequence |
|  |  |  | Substitution given term to calculate answer or answer to calculate term |
|  | Circle | Angles | Revision of complementary and supplementary angles |
|  |  | Angles on parallel lines | Angles on parallel lines including alternate (Z), corresponding (F), allied (or co-interior) $U$ and vertically opposite angles. |
|  |  | Relationship between radius \& tangent | Tangent to a circle |
|  |  | Angles in semi-circle | Calculate angles in a semi-circle where right-angle is at the vertex on circumference from diameter using angles in triangle add up to 180 degrees. |
|  |  |  | Use Pythagoras Theorem to calculate missing side |
|  |  |  | Use SOHCAHTOA to calculate missing side or angle |
|  | Percentages | Money - percentages | Simple Interest |
|  |  |  | Compound Interest |


| TERM 2 - October to December | Angles, Symmetry and Transformation | Right angled triangles - Trigonometry | Bearings (revise) |
| :---: | :---: | :---: | :---: |
|  |  |  | SOHCAHTOA - Use bearings to find a distance or direction |
|  | Circle | Circumference \& Area | Circumference \& Area of a Circle <br> Calculating the length of arc |
|  |  | area of a sector of a circle | Calculating the area of a sector of a circle |
|  | Ratio \& Proportion | Ratio | Calculate ratio given quantities, writing in simplest form |
|  |  |  | Calculate a quantity, given ratio |


| ¢ | Statistics | Statistics | Five figure summaries |
| :---: | :---: | :---: | :---: |
|  |  |  | Box Plots - draw and interpret data i.e., each quartile represents $25 \%$ regardless of how large it is compared to the other quadrants |
| $\begin{aligned} & \frac{2}{0} \\ & \frac{\pi}{7} \\ & \frac{त}{0} \\ & \hline \end{aligned}$ |  |  | Compare two box plots and interpret data |
|  |  |  | Interquartile range \& Semi-interquartile range |
| $\sum_{\text {c }}^{n}$ |  |  | Standard Deviation |
| $\stackrel{1}{\square}$ | Project |  |  |



