| Year 12 | Subject Theme | Wider Reading/Independence |
| :---: | :---: | :---: |
| Autumn | Algebraic expressions, Straight line graphs, differentiation, integration, Equations and inequalities, circles, Graphs and transformations | The number mystery- Marcus Du Sautoy <br> Professor Stewarts cabinet of Mathematical curiosities- Ian Stewart <br> More or less podcast |
| Spring | Algebraic methods, Trigonometric ratios, trigonometric equations and identities, Exponentials and logarithms, Vectors, radians , Trigonometric functions, modelling with trigonometry | Why do buses come in threesRob Easterway <br> The man who loved only num-bers- Paul Hoffman <br> Youtube numberphile channel |
| Summer | Data collection, Measures of location and spread, representations of data, correlation, probability, Statistical distributions, Hypothesis testing, Modelling in mechanics, constant acceleration, Forces and motion, variable acceleration | The Simpsons and their mathematical secrets-Simon Singh 1089 and all that- David Acheson <br> Wrong but useful podcast |

Subject Name: Mathematics
$\left.\begin{array}{|l|l|l|}\hline \text { Year 13 } & \text { Subject Theme } & \text { Wider Reading/Independence } \\ \hline \text { Autumn } & \begin{array}{l}\text { Algebraic Methods, Functions and } \\ \text { graphs, Sequences and Series, Binomial } \\ \text { Expansion, Radians, Moments, Regres- } \\ \text { sion, Forces and Friction, Conditional } \\ \text { Probability }\end{array} & \begin{array}{l}\text { Cracking Mathematics, You, this } \\ \text { book and 4000 years of theories } \\ \text { - Colin Beveridge } \\ \text { Flatland, A romance of many di- } \\ \text { mensions-Edwin Abbott } \\ \text { Youtube Vi Hart channel }\end{array} \\ \hline \text { Spring } & \begin{array}{l}\text { Trigonometric Functions, Modelling } \\ \text { with Trigonometry, Parametric Equa- } \\ \text { tions, Numerical Methods, Vectors, } \\ \text { Differentiation, Integration, Projectiles, } \\ \text { The Normal Distribution, Applications } \\ \text { of forces, Further Kinematics }\end{array} & \begin{array}{l}\text { Fermats last theorem- Simon } \\ \text { Singh }\end{array} \\ \text { The codatively pook-Simen Singh podcast }\end{array}\right\}$

