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| **What will we be learning?**Algebra – Straight line Graphs, Solving equations, quadratic graphs, cubic graphs, reciprocal graphs | **Why this? Why now?** The algebra unit builds again on the previous unit allowing students to build and further their knowledge on solving equations. The graph sketching of quadratic, cubic and reciprocal graphs is stepping stone to further the knowledge from drawing linear graphs. To understand what changes in the equation will help students understand why the graph changes.  | **Key Words:**Y=mx+cFormulaGradientY intercept.AxisLinear EquationSolutionQuadracticCubicReciprocalIntercepts RootsTurning PointInterpret SketchPlot |
| **What will we learn?*** Recap what y=mx+c is
* Use y=mx+c and plot a graph
* Interpret a graph and find the formula
* Solve linear equations with one unknown and use a graph to find an approximate solution
* Recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic functions and the reciprocal function.
* Identify and interpret roots, intercepts and turning points of quadratic functions graphically
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| **What opportunities are there for wider study?****Dr Frost Maths** is the primary resource that we use for homestudies and it has lots of useful revision tools. Alongside this, you can search for a specific topic and you can either practise some questions online, or watch a video. Under the resources section, there is also a “Full Coverage” document for some topics that have a huge bank of exam questions on the topic in question. <https://www.drfrostmaths.com/course.php?sid=-10> **Corbett Maths -** video links as well as Practice Questions and Textbook Exercises and answers available. <https://corbettmaths.com/contents/> **MathsGenie -** website that has videos and exam questions (along with worked solutions). <https://www.mathsgenie.co.uk/advance-information.html>**Career Link**Finance, Engineering |
| **How will I be assessed?**Mock AssessmentsHomestudy TasksQuality of classwork |