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| **What will we be learning?**  **Number:** Estimation and rounding  **Algebra:** Sequences, Graphical representations of linear relationships, Solving linear equations | **Why this? Why now?**  Rounding is a valuable tool for estimating number to varying degrees of accuracy. It is important to develop a strong sense of the size of numbers and be able to use various methods of rounding, especially when giving answers in context.  A sound understanding of the relationships between the x- and y-values of pairs of coordinates provides the basis for more sophisticated analysis of the features of linear functions and their graphs, which students will need to develop throughout Key Stage 3.  Building on Key Stage 2 experiences, this collection of key ideas explores how simple, one-step linear equations are the formulation of one operation on an unknown number, and how these equations can be solved by undoing the operation to find the value of the unknown. | **Key Words:**  Decimals  Significant figure  Estimate  Term  Sequence  Arithmetic sequence  Geometric sequence  nth term of a sequence  Coordinates  Graphs  Axis  Gradient  Intercept  Linear  Equation  Linear  Solution  Coefficient  Unknown  Variable |
| **What will we learn?**   * Round numbers to a required number of decimal places. * Round numbers to a required number of significant figures. * Estimate calculations by rounding. * Understand the features of a sequence. * Recognise and describe arithmetic sequences. * Connect coordinates, equations and graphs. * Explore linear relationships. * Understand what is meant by finding a solution to a linear equation with one unknown. * Solve a linear equation with a single unknown on one side where obtaining the solution requires one step. * Solve a linear equation with a single unknown where obtaining the solution requires two or more steps (no brackets). * Solve efficiently a linear equation with a single unknown involving brackets. | |
| **What opportunities are there for wider study?**  **Dr Frost Maths** is the primary resource that we use for home studies and it has lots of useful revision tools. Your PLC will link to the relevant Dr Frost video and you can then select “Practise this skill” button below to practise some questions.  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.  Log in to get the most out of this resource.  <https://www.drfrostmaths.com/course.php?sid=-10>  **Corbett Maths** is a good website that has video links as well as Practice Questions and Textbook Exercises. There are also answers available.  <https://corbettmaths.com/contents/>  **MathsGenie** is another website that has videos and exam questions (along with worked solutions).  <https://www.mathsgenie.co.uk/advance-information.html>  **Careers Link**  Finance – loans, mortgage, budget | |
| **How will I be assessed?**  Home study  Half term assessment  Quality of classwork | |