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| **What will we be learning?**  ***Number:*** Arithmetic procedures with Integers (inc negatives) and decimals.  ***Geometry:*** Parallel and triangle angle facts.  ***Algebra:*** Conventions, vocabulary, interpreting and manipulating algebraic expressions. | **Why this? Why now?**  Understanding of the structure of the four main mathematical operations with integers, negatives and decimal values provides a foundation of all future mathematical topics.  Geometry and Algebra units provide new content discovery early in Year 7 and provide the foundation for these topics to be investigated further in Year 8, 9 and beyond. | **Key Words:**  Decimal  Significant Figures  Cube root  Exponent  Index  Square Root  Venn Diagram  Additive Identity  Associative  Commutative  Distributive  Multiplicative Identity  Rational Number  Reciprocal  Binomial  Equation  Expression  Factorise  Formula  Substitute/Substitution  Variable  Angle  Parallel |
| **What will we learn?**   * Understand the mathematical structures that underpin the four operations. * Be able to apply the four operations to positive/negative integers and decimals. * Understand parallel angle facts and angle facts in triangles. * Be able to use and apply the laws of arithmetic, commutative, associative and distributive law and calculate using the correct order of operations. * Use and apply algebraic notation and conventions to manipulate algebraic expressions. * Be able to form, expand, simplify and factorise algebraic expressions. | |
| **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](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/](https://corbettmaths.com/contents/ )  **MathsGenie -** website that has videos and exam questions (along with worked solutions).  <https://www.mathsgenie.co.uk/advance-information.html>  Euclidian Geometry - <https://www.britannica.com/science/Euclidean-geometry>  **Careers Link**  Air Traffic Controller | |
| **How will I be assessed?**  Half term assessments  Homestudy tasks  Quality of classwork | |