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| **Year 10 Term 1.1 - Maths** | |  | | | | | |
| **Enquiry Question: Are all numbers created equal?** | | | | | | | |
| **Unit title: Natural Numbers**  **Why now?** This unit of work build on the numbers you first learn in primary school and in Langdon Park School at **year 7,** where we first learnt about **natural numbers**. This unit builds on this and looks at problem solving with special numbers such as **triangle numbers**, properties of **primes** and **Goldbach’s conjecture.** | | | | | | | |
| **Knowledge**  Students will know about… | **Application/Skills**  Students will be able to… | | **Vocabulary**  *(Tier 2 and 3)* | **Home**  **Learning** | **Assessment** | **Extra Resources**  **Extended Reading** | **Cultural**  **Capital** |
| 1. Recap ideas on types of number-odd. even, square, cube, triangle, primes 2. Recap ideas on factors and multiples 3. The laws of arithmetic 4. Divisibility tests 5. Primes and the Fundamental Theorem of Arithmetic 6. Prime factorisation 7. Highest Common Factors and Lowest Common Multiples using Venn diagrams and prime factors 8. Problems with primes and HCF/LCM | 1. Identify different types of numbers 2. Understand and apply order of operations 3. Apply the Fundamental Theorem of Arithmetic and find the product of primes. 4. Find the HCF and LCM of numbers using Venn diagrams otherwise. 5. Reason and problem solve with natural numbers. | | ***Tier 2***  Reason  Justify  inverses  ***Tier 3***  Even  Odd  Prime  Square  Cube  Triangular  Proof  Venn diagram | **Pre-classroom:**  Pre-lesson tasks on **google classroom** to get you thinking.  Diagnostic questions  **Post-Classroom:**  Post lessons online tasks:   * My Maths * Google Form Quizzes * Independent learning notes | Summative Assessment at the end of T1. | **Enrichment:**  Multiplication Square  <https://nrich.maths.org/2821>  -What is possible <https://nrich.maths.org/whatspossible>  Research:  How did the early humans keep count? | **Cultural Capital:**  Explore how the Hindu Arabic number system was formed. |
| **Numeracy**  Product  Sum  Total  Add  Subtract  Difference |