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| **Year 7 Term 1.1 - Maths** | |  | | | | | |
| **Enquiry Question: What are the elements that all whole numbers are made of?** | | | | | | | |
| **Unit title: Integers and building a classroom**  **Why now?** This unit of work will deepen your understanding of whole numbers, building on what you learned at primary school. In particular, it will help you understand the special importance of **prime numbers** and develop your understanding of the **order of operations** and **negative numbers**. You will use this in almost all the maths you go on to study afterwards. Throughout you will also build your skill in **working in teams** in a maths classroom- skills which will help you throughout your learning journey in maths. | | | | | | | |
| **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. The importance of listening and communication. 2. Working in groups in lessons. 3. How to develop their oracy skills. 4. How to work and learn in a maths classroom. 5. Properties of natural numbers - squares, cubes, factors, multiples, prime numbers. 6. Negative numbers. | 1. Work in a team 2. Communicate using mathematical language with others. 3. Secure fluency in arithmetic with integers. | | ***Tier 2***  Discussion  Teamwork  Communication  Inverse  operations  Index form  ***Tier 3***  Odds  Even  Square  Cube  Primes  Factors  Multiples  Triangular numbers | **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 | Formative assessment at the end of the units in their LPS books.  This will be a combination of students presenting what they know in a creative way followed by some differentiated questions.  Summative Assessment at the end of T2. | **Enrichment:**  **The history of negative numbers:** <https://nrich.maths.org/5961>  **Origins of zero and negatives in Indian mathematics:**  <https://www.youtube.com/watch?v=pElvQdcaGXE&index=5&list=PLlxVFemWlyMJauDiYgfoRzA_vAQFOCEoB> | Rooms 55 and 56 in the British museum (free) showing some of the first mathematics ever written down.  https://www.britishmuseum.org/ |
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