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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***DiscussionTeamworkCommunicationInverseoperationsIndex form***Tier 3*** OddsEvenSquareCubePrimesFactorsMultiplesTriangular 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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