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| **Year 7 Term 3.1 - Maths** | |  | | | | | |
| **Enquiry Question: What’s between whole numbers on a number line?** | | | | | | | |
| **Unit title: Rational Numbers**  **Why now?** This unit extends work you have already done on whole numbers in the unit **Integers**, to **fractions, decimals and percentages** and helps you understand the connections between these and become fluent in arithmetic with them. You will use these skills in almost all the maths you do later. | | | | | | | |
| **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. What’s between the integers? 2. Rational numbers and fractions 3. Equivalence - a key idea in mathematics 4. Arithmetic with fractions 5. Decimals, place value and representing fractions as decimals 6. Arithmetic with decimals- understanding and fluency 7. Percentage as a type of fraction 8. Converting fractions, decimals and percentages- understanding and fluency 9. (extension) Irrational numbers and approximating them with rationals 10. Abul Hasan al-Uqlidisi and the origin of decimals | 1. Secure fluency with arithmetic with fractions, decimals. 2. Convert between fractions, decimals and percentage. 3. Group numbers into rational and irrational. | | ***Tier 2***  Rational  Irrational  Equivalence  Approximating  ***Tier 3***  Fraction  Place value  Rounding | **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 Dangerous Ratio (article)** <https://nrich.maths.org/2671>  **Al Uqlidisi and the origin of decimals** <https://mathshistory.st-andrews.ac.uk/Biographies/Al-Uqlidisi/> | **Cultural Capital:**  Visit the London Eye and see if you can work out what fraction, percentage and decimal one pod represents of the whole wheel. |
| **Numeracy**  Product  Sum  Total  Add  Subtract  Difference |