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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 IrrationalEquivalenceApproximating***Tier 3***FractionPlace valueRounding | **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**ProductSumTotalAddSubtractDifference |