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| **Year 9 Term 1.1 - Maths** | |  | | | | | |
| **Enquiry Question: How do we know whether two drinks of squash are the same strength if they have different volumes?** | | | | | | | |
| **Unit title: Ratio (Lemonade)**  **Why now?** This unit builds on the introductory ideas of ratio you meet in **Year 8** which link ratios to **multiplicative relationships**. This unit takes these ideas further using **equivalence, linear functions, and graphical forms of ratios** to develop your understanding of ratios. These new ideas are further developed in **Year 10 and 11** when we explore **algebraic forms.** | | | | | | | |
| **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 on key ideas of ratio 2. Developing fluency in choosing most useful representation for a particular problem 3. What is a unitary ratio and how can we use it? 4. Working with more complex ratio problems | 1. Work in a team 2. Communicate using mathematical language with others. 3. Secure fluency in arithmetic with integers. | | ***Tier 2***  Relationship  Range  Equivalent  Notation  Equivalence  Inverse  ***Tier 3***  Multiplicative  Reciprocal  Unitary  Function  Linear | **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:**  Explore ratio in context by  investigating the dilution series on Nrich using the interactive applet  on  [**https://nrich.maths.org/6164**](https://nrich.maths.org/6164) | Visit the National History Museum for free and work out the ratio of the skeleton of the blue whale in the main hall to yourself! Can you write this in the form **1:n?** |
| **Numeracy**  Difference  Factor  Multiple  Divisor  Quotient |