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| **Year 8 Term 4.2 – Maths** | |  | | | | | |
| **Enquiry Question: How can you know whether two paint mixes of different sizes will give**  **the same colour?** | | | | | | | |
| **Unit title: Introduction to Ratio**  **Why now?** This unit builds on work you did in the **Proportional Reasoning** unit and in the **Rational numbers** unit you did in **year 7** to develop your understanding of a key mathematical idea. You developed these ideas in the **Measuring the World** unit in **year 8**; you will extend them further in **Going Deeper with ratio**; **Similarity**; and **Linear Functions** and **Graphs** units in **year 9** and in studying **Trigonometry** in **year 10.** | | | | | | | |
| **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 is ratio? 2. Equivalent ratios 3. Ratio, proportion and fractions 4. Different ways of representing ratio 5. Solving problems with ratio 6. Fibonacci and the Golden Ratio | 1. Find a ratio of an amount 2. Use colon notation. 3. Use multipliers in ratios. 4. Simplify ratios. 5. Find unitary ratios. | | ***Tier 2***  Ratio  Multipliers  Simplify  Colon  Equivalence  ***Tier 3***  Reciprocal  Linear function **Numeracy**  Product  Sum  Total  Add  Subtract  Difference | **Pre-classroom:**  Pre-lesson tasks on **google classroom** to get you thinking.  Diagnostic questions  **Post-Classroom:**  Post lessons online tasks:   * My Maths * Google Form Quizz * dependent 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 T4. | **Enrichment:**  **Fibonacci and his sequence:** <https://nrich.maths.org/2563>  **The Golden Ratio in nature (video)** <https://www.youtube.com/watch?v=me6Dnl2DOtM> | **Cultural Capital:**  Visit London Zoo. What is the ratio of penguins to the tigers? |
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