|  |  |
| --- | --- |
| **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***RatioMultipliersSimplifyColon Equivalence ***Tier 3***ReciprocalLinear function **Numeracy**ProductSumTotalAddSubtractDifference | **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? |
|  |