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| **Year 8 Term 5.1 - Maths** | |  | | | | | |
| **Enquiry Question: How many times are you bigger than an atom?** | | | | | | | |
| **Unit title: Standard Form**  **Why now?**In **year 7** you explore different types of numbers, including **integers** and **rational numbers**. You also go on to learn about **powers of ten** in the **indices and roots** unit earlier **this year**. This builds on both of those units and you explore more practical ways to solve mathematical problems with **large and small numbers.** These are then applied to many further units throughout your mathematical journey at LPS. | | | | | | | |
| **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. Powers of ten and index form 2. Standard Form 3. Arithmetic in Standard Form 4. Uses of Standard Form | 1. Write and interpret powers of 10 both positive and negative 2. Write small and large numbers in Standard Form 3. Convert numbers given in Standard Form to ordinary numbers 4. Carry out arithmetic with numbers in Standard Form 5. Apply Standard Form in different real world contexts | | ***Tier 2***  Scale  Universe  Atomic  Adjust  ***Tier 3***  Index  Power  Substitute  Standard Form  Scientific Notation | **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 T4. | **Enrichment:**Explore the applet “The scale of the Universe 2“  <http://htwins.net/scale2/>  -Matching Activity : <https://nrich.maths.org/14530> | **Cultural Capital:**  You can visit the National History Museum, check all the solar system planets and write their diameter and circumference in standard form |
| **Numeracy**  Multiply  Divide  Add  Subtract  Laws of Indices |