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| **Year 8 Term 2.1 - Maths** |  |
| **Enquiry Question: What’s the point of algebra?** |
| **Unit title: Grid Algebra I****Why now?** You had an insight into Algebra, in the **Language of Maths** unit earlier in the year. You will now explore this further to secure your knowledge on the basics of Algebra to help you make **logical** decisions and **solve problems** mathematically. This is developed further in **Year 8** when we learn about more algebra in the unit called **Grid Algebra II.** |
| **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. Equivalent calculations in arithmetic
2. Generalising from arithmetic to algebra and equivalent expressions in algebra
3. The laws of algebra
4. Manipulating and simplifying expressions using equivalence- collecting like terms, expanding, simplifying, substitution
5. Al Kwharizmi and the Islamic origins of algebra
6. Florence Nightingale and the use of data.
 | 1. Write equivalent expressions
2. Collect like terms
3. Expand single and double brackets.
4. Factorise single brackets
5. Substitute values into expressions.
 | ***Tier 2***Equivalent TranslateExpressionIdentity Context***Tier 3***AlgebraicEquationFactoriseCoefficientVariable  | **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 the stages of **Rhetorical,** **Syncopated** and **Symbolic Algebra**. Who developed them and when? | **Cultural Capital:** Can you use your knowledge of problem solving and logic to develop real world maths skills at the beautiful countryside? [https://www.audley-end-railway.co.uk](https://www.audley-end-railway.co.uk/)  |
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