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| **Key Topics and Learning Sequence** | | | | | |
| **= First Steps** | **= Moving On** | | **= Stretch** | | **= Challenge** |
| **1. Mathematical language and notation**   1. Know definitions of **integer, product, sum** and **total**      1. Identify an **equation** and **expression** 2. Know symbols such as **≠,∴,∎**   d) Know symbols such as **∃ and ∀** | **2. Equals**   1. Create an equation which is true      1. Use the equals sign correctly when writing out a calculation. 2. Understand **identities** are always true and use the **symbol ≡** when appropriate      1. Write an equation using two others with a shared **variable** | **3. Laws of Arithmetic**   1. Can correctly assess the **commutativity** of addition and subtraction. 2. Can correctly assess the **commutativity** of multiplication and division. 3. Apply your knowledge of **commutativity** to understand that **identities** are always true      1. You understand the laws of **association** and **distribution** | | **4. Variables**   1. Answer a question involving an **unknown** 2. Write an **expression** with a **DEFINED variable** which involves addition and multiplication      1. Write an **expression** with a **DEFINED variable** which involves subtractions and division      1. Write an **expression** which relates to more than one variable | |
| **How does this unit fit into your mathematical learning journey?** | | | **Further Exploration, Enrichment and Cultural Capital** | | |
| This unit of work build on the mathematical vocabulary, symbols, and notation you **first learn in primary school** and introduces you to new language and notation which you will come across many times in your secondary mathematics education and need in **almost every unit** you learn in your five years at Langdon Park School. | | | **Reading:** Why do we need algebra? [**https://www.wonderopolis.org/wonder/why-do-i-need-to-learn-algebra**](https://www.wonderopolis.org/wonder/why-do-i-need-to-learn-algebra)  **Enrichment:** Look at the Royal Institution Website and enjoy a family fun day exploring some interactive maths or listening to some talks![**https://www.rigb.org/families/family-fun-days**](https://www.rigb.org/families/family-fun-days)  Watch this Hannah Fry video on why we need algebra and variables: [**https://www.youtube.com/watch?v=-LI9iX9tC1k**](https://www.youtube.com/watch?v=-LI9iX9tC1k) | | |

**LPS Mathematics: Year 7 Unit 2 – Language of Mathematics**

**Enquiry Question:** **Why do we need a universal mathematical language?**

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**Date: Initial Thoughts:**

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**Date: New Thoughts:**

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**Date: Final Thoughts:**

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