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| **Year 9 Term 5.2 - Maths** | |  | | | | | |
| **Enquiry Question:  What makes a Linear graph straight?** | | | | | | | |
| **Unit title: Graphs and Linear Functions**  **Why now?** This unit introduces you to some new ideas about the **proportional relationship** between two variables. You first meet **proportion** in **Year 7** and build on this in **Year 8.** This unit shows how **graphs can represent** these relationships and then this is taken further 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 a graph? 2. What is a linear function and what does it graph look like? 3. The algebra of linear functions and graphs 4. Gradient and intercept 5. What is the significance of where the graphs of two linear functions intersect? 6. Modelling problems with linear functions and graphs. 7. Real life graphs - distance-time; conversion 8. Other kinds of graphs | 1. Work in a team 2. Communicate using mathematical language with others. 3. Having a mathematical Conversation with other students 4. Learning a graphical language to represent relationships | | ***Tier 2***  Coordinate  Axes  Linear  Composite  Notation  Output  Input  Rearrange  Substitute  ***Tier 3***  Function  Linear Function  Composite Function  Gradient  Y intercept  Constant  Term | **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:**  Explored straight lines in art   * + - 1. Explore the artists Barbara Hepworth and Naum Gabo and find pieces of their artwork which create curves using straight lines.       2. Create your own piece of artwork   . | Visit your local go karting centre and work out the graphical representation of your journey around the track. |
| **Numeracy**  Product  Sum  Total  Difference |