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| **Core Knowledge Map** | | | |
| Subject: **Mathematics** | Year: 10 | | Term: Summer 1 |
| What are we learning? | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Unit 10: Non-Linear graphs** | **Sparx IL Codes** | Sad face outline with solid fill | Nervous face outline with solid fill | Smiling face outline with solid fill | | Recognise a linear, quadratic, cubic, reciprocal, exponential and circle graph from its shape | U980,U593,  U229 |  |  |  | | Recognise graphs representing direct and inverse proportion |  |  |  |  | | Plot non-linear graphs from a table of values | U989 |  |  |  | | Find approximate solutions of a quadratic equation from the graph of its function | U601  U875 |  |  |  | | Sketch a quadratic graph to include turning point and x-intercepts | U769 |  |  |  | | Using one graph to solve another | U875 |  |  |  | | | | |
| How will I be assessed | | | |
| Retrieval Tasks, Exit tickets, end of half-term test. | | | |
| Big questions: | | | |
| Can you….? | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| * Plotting and sketching straight line graphs. * Write a quadratic expression in complete the square form * Solving a quadratic equation to find the roots of the function. * Using the table function on the calculator efficiently to generate a table of values. | | * Transformation of graphs * Solving linear and non-linear simultaneous equations both algebraically and graphically * GCSE synoptic and multi-step problem solving questions. | |
| Core knowledge: | | Key vocabulary: | |
|  | | Quadratic  Cubic  Exponential  Reciprocal  Direct proportion  Inverse proportion | |
| Need more help? Use the Sparx Independent Learning Codes above | | | |