| Subject | Year | Month |  |
| :---: | :---: | :---: | :---: |
| Mathematics | 11 | December | Balcarra |
| Topic: |  |  |  |
| Quadratic equations: graphs 3 lessons |  |  |  |
| Content (Intent) |  |  |  |
| Prior Learning <br> Year 10 Expanding brackets November <br> Year 11 Quadratic equations: expanding and factorising | Future Learning |  |  |
| Objectives <br> - Generate points and plot graphs of simple quadratic functions, then more general quadratic functions: <br> - Identify the line of symmetry of a quadratic graph: <br> - Find approximate solutions to quadratic equations using a graph; <br> - Interpret graphs of quadratic functions from real-life problems; <br> - Identify and interpret roots, intercepts and turning points of quadratic graphs. |  |  |  |
| Pedagogical notes (implementation) | How will understanding be assessed \& recorded (Impact) |  |  |
| The graphs should be drawn freehand and in pencil, joining points using a smooth curve. | End of half term no End of Year 2 ${ }^{\text {nd }}$ mocks in Feb \& March |  |  |
| Encourage efficient use of the calculator. | How can parents help at home? |  |  |
| reciprocal graphs, solving simultaneous equations graphically. | MathsWatch clips <br> Qualification KS3: A15 <br> Qualification KS4: $98,160,161$ |  |  |
| Further reading/discussion |  |  |  |
| Reading / Enrichment http://passyworldofmathematics.com/sydney-harbour-bridge-mathematics/ | Literacy | Numeracy Links | Careers Links <br> Engineer <br> Physicist <br> Statistician |

