## Year 8 Topic Overview and assessments

| Week | Topic | Assessment Learning Landmark |
| :---: | :---: | :---: |
| 1 | Factors, multiples, primes <br> HCF LCM inc. product of primes and Venn Diagrams |  |
| 2 | $\mathrm{N}^{\text {th }}$ term formula linear. Generate sequences and find a formula. Types of sequence AP, GP , Fibonacci \& Quadratic nth term |  |
| 3 | Compass constructions triangles and bisectors Properties of 2D shapes | LL1 - Mixed Homework sheet 2 |
| 4 | Plans and elevations Problem solving |  |
| 5 | Revision Introduction to probability | LL2: Test 1 (non-calculator) |
| 6 | Sample space \& Relative frequency |  |
| 7 | Expected outcomes <br> Probability trees, Frequency trees and two way tables |  |
| Half Term |  |  |
| 8 | Fractions of amounts \& Four operations with fractions |  |
| 9 | Percentages of amounts, Increasing and decreasing by percentages Writing and simplifying ratios |  |
| 10 | Revision Sharing in a ratio | LL3: Test 2 (non-calculator) |
| 11 | Scale drawing, special offers and unitary method for best buys. Ratio \& direct proportion <br> Simplifying expressions |  |
| 12 | Substitution <br> Expanding single brackets and double brackets | LL4 - Mixed Homework sheet 7 |
| 13 | Factorising linear expressions \& Factorising quadratics Problem solving \& Numeracy |  |
| 14 | Bedroom project presentations \& Christmas activities |  |
| Christmas |  |  |
| 15 | Metric \& Imperial conversions Introduction to compound measures |  |
| 16 | Area of basic 2D shapes and compound area Volume of prisms |  |
| 17 | Area and circumference of circles Perimeter of shapes | LL5 - Mixed Homework sheet 10 |
| 18 | Using calculators efficiently Problem solving |  |
| 19 | Revision \& assessment | LL6 - Spring exam 1 (noncalculator) |
| 20 | Rounding to decimal places and significant figures, estimation by rounding (1sf) <br> Bounds, error intervals and calculations <br> BIDMAS revision |  |
| Half Term |  |  |
| 21 | Forming and solving equations |  |
| 22 | Linear simultaneous equations <br> Plotting co-ordinates and co-ordinate problem solving Plotting straight line graphs |  |
| 23 | Reflecting \& rotating shapes Translating shapes |  |
| 24 | Revision \& assessment | LL7 - Spring exam 2 (calculator) |
| 25 | Enlargements \& Mixed transformations |  |
| 26 | Domino sky scraper problem solving task <br> Famous mathematician poster presentations Easter Maths activities | LL8 - Mixed Homework sheet 15 |
| Easter |  |  |
| 27 | Finding basic averages (mean, median, mode, range) Drawing and interpreting pie charts Bar graphs |  |
| 28 | Scatter graphs and correlation <br> Stem and leaf diagrams and Two-way tables <br> Averages from frequency tables | LL9 - Mixed Homework sheet 17 |


| 29 | Laws of indices <br> Problem solving |  |  |  |
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| 30 | Revision \& assessment |  |  |  |
| 31 | Negative numbers <br> FDP conversions and ordering <br> Problem solving | LL10 - Summer exam 1 (non- <br> calculator) |  |  |
| Half Term | Multiplying and dividing with decimals <br> Basic angle rules, Drawing, measuring and estimating angles, \& Angles in <br> parallel lines |  |  |  |
| 32 | Bearings <br> Pythagoras | LL11 - Mixed Homework sheet 21 |  |  |
| 33 | Types of data \& Sampling <br> Problem solving | LL12 - Summer exam <br> (calculator) |  |  |
| 34 | Revision \& assessment |  |  |  |
| 35 | Collecting, processing and displaying data project |  |  |  |
| 36 | Theme park presentations |  |  |  |
| 37 |  |  |  |  |

