**Year 8 Topic Overview and assessments**

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| **Week** | **Topic** | **Assessment Learning Landmark** |
| 1 | Factors, multiples, primes  HCF LCM inc. product of primes and Venn Diagrams |  |
| 2 | Nth 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  **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**  Simplifying expressions |  |
| 12 | Substitution  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 (non-calculator) |
| 20 | Rounding to decimal places and significant figures, estimation by rounding (1sf)  **Bounds, error intervals and calculations**  BIDMAS revision |  |
| Half Term | | |
| 21 | Forming and solving equations |  |
| 22 | **Linear simultaneous equations**  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**  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  Stem and leaf diagrams and Two-way tables  **Averages from frequency tables** | LL9 - Mixed Homework sheet 17 |
| 29 | Laws of indices  Problem solving |  |
| 30 | Revision & assessment | LL10 – Summer exam 1 (non-calculator) |
| 31 | Negative numbers  FDP conversions and ordering  Problem solving |  |
| Half Term | | |
| 32 | Multiplying and dividing with decimals  Basic angle rules, Drawing, measuring and estimating angles, & Angles in parallel lines |  |
| 33 | **Bearings**  Pythagoras | LL11 - Mixed Homework sheet 21 |
| 34 | Types of data & Sampling  Problem solving |  |
| 35 | Revision & assessment | LL12 – Summer exam 2 (calculator) |
| 36 | Collecting, processing and displaying data project |  |
| 37 | Theme park presentations |  |