# Curriculum Implementation Mapping – Skills and Knowledge

**Subject: Maths**          **Year group: 8**

| Topic | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
|---|---|---|---|---|---|---|
| **Knowledge** | Factors and Multiples: LCM, HCF, squares, primes, roots, cubes.<br><br>Ratio, proportion and percentages: simplify ratios, equivalent ratios, divide into a ratio. % increase, decrease, reverse % | Algebraic expressions and formulae: key words, simplifying, expanding/factorising<br><br>Mensuration: perimeter, formulae for area of 2d shapes, compound shapes, volume of prisms. units | Negative, fractions and decimals: four operations with negatives, rational & irrational numbers fractions & decimals, approximation<br><br>Rate and Speed: proportional rates, DST, units, distance time graphs | Equations & Inequalities: Solving, manipulating<br><br>Functions & graphs: top sets only.<br><br>Angles: Angle rules, types of triangles & quadrilaterals, polygons | Angles and Constructions: Top set only. Different angle types, properties of shapes. Key words.<br><br>Data: Types of data/collection, graphs and charts | Probability: sum to 1, use of fractions, experimental probability etc<br><br>Code breaking: types and uses of codes. Historical context |
| **Skills** | F&M: complete prime factor trees, use venn diagrams to find HCF/LCM.<br><br>RPP: use bar models to solve ratio problems, calculator and non calc methods for percentage of an amount, increase and decrease. Use multipliers | AE&F: collect like terms, identify HCF of algebraic terms, multiply algebraic terms<br><br>M: find the area and perimeter of 2d shapes. Apply rules for area to compound shapes. | NFD: using a number line, apply rules of operations to negatives, fractions, decimals and mixed numbers. Round numbers to different degrees of accuracy. Estimate calculations.<br><br>R&S: calculate a rate. Use DST triangle to find missing values. Convert metric units of time, speed and distance. Read and draw a distance time graph. | E&I: use a balancing method. Draw an inequality on a number line<br><br>F&G: Coordinates, plot linear equations<br><br>Angles: find missing angles, apply rules of angles & properties of triangles/quadrilaterals. Use formula for sum of interior angles | A&C: use a protractor, compass, ruler accurately. Construct bisectors, triangles etc.<br><br>Data: draw and read graphs, charts. Critique questionnaires | P: find probability of a single event, calculate relative frequency, probability of an event not happening<br><br>CB: pigpen, rail fence, frequency analysis |
| **Assessment Pattern** | | Term 2 Summary Assessment | | Term 4 Summary Assessment | | Term 6 (End of Year) Summary Assessment |