

## YEAR 9 CURRICULUM SUMMARY

| When? |  | Key Learning Objectives Key Questions | Unit Assessment (End of Chapter Test) |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { HALF } \\ & \text { TERM } 1 \end{aligned}$ | Ch 1: Basic Number | - compare and order positive and negative numbers <br> - use the order of operations when calculating <br> - add, subtract, multiply and divide positive and negative integers and positive decimals without a calculator. | EOC Test 1: Basic Number <br> Compare \& order integers, BIDMAS,,,$+- \times, \div$ integers without a calculator |
|  | Ch 5: Number: Number properties | - find multiples and factors <br> - I know what prime numbers are <br> - break a number down into its prime factors <br> - work out the lowest common multiple of two numbers <br> - work out the highest common factor of two numbers <br> - work out squares and square roots <br> - use a calculator for basic calculations. | EOC Test 5: Number: Number properties Multiples, factors, primes, prime factors, LCM, HCF, squares \& square roots, use calculator |
| $\begin{aligned} & \text { HALF } \\ & \text { TERM } 2 \end{aligned}$ | Ch 6: Number : Approximations | - round a number to a given accuracy <br> - estimate the answer to calculations by rounding <br> - find the limits of numbers rounded to a given accuracy <br> - work out the error interval due to rounding or truncation. | EOC Test 6: Number : Approximations <br> Round, estimate, limits of numbers after rounding, error intervals, truncation |


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| $\begin{aligned} & \text { HALF } \\ & \text { TERM } 3 \end{aligned}$ | Ch 7: Number: Decimals \& fractions | - multiply and divide decimals <br> - convert between rational numbers, fractions and decimals <br> - find reciprocals of numbers and fractions <br> - work out one quantity as a fraction of another <br> - add, subtract, multiply and divide fractions, with and without a calculator. | EOC Test 7: Number: Decimals \& fractions $\times, \div$ decimals, convert between rationals, fractions \& decimals. Reciprocals, one quantity as a fraction of another,,,$+- \times, \div$ fractions without a calculator |
|  | Ch 3: Statistics: Charts, tables \& averages | - use tally charts and frequency tables to collect and organise data <br> - represent data on various types of diagram <br> - draw a line graph to show trends in data <br> - work out the mode, median, mean and range of small sets of data <br> - decide which is the best average to use <br> - use an average and the range to compare sets of data <br> - draw and interpret stem-and-leaf diagrams | EOC Test 3: Statistics: Charts, tables \& averages Tally charts, frequency tables, line graph, mean, mode, median, range, best average?, compare, stem \& leaf |


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| HALF TERM 4 | Ch 4: Geometry \& Measures: angles | - calculate angles on a line and around a point <br> - calculate angles in a triangle and in any polygon <br> - calculate angles in parallel lines <br> - calculate interior and exterior angles in polygons <br> - use bearings. | EOC Test 4: Geometry \& Measures: angles <br> Angles on a line, around a point, in a triangle, in a polygon, in parallel lines, interior \& exterior angles in polygons, bearings |
|  | Ch 2: Geometry \& Measures: measures \& scale drawings | - convert from one metric unit to another <br> - convert from one imperial unit to another <br> - convert from imperial units to metric units <br> - read and draw scale drawings <br> - read map scales <br> - draw nets of 3D shapes and identify 3D shapes from their nets <br> - draw plans and elevations. | EOC Test 2: Geometry \& Measures: measures \& scale drawings <br> Convert metric \& imperial, read \& draw scale drawings, read map scales, know \& recognise nets of 3D shapes, plans \& elevations |


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| HALF <br> TERM 5 | Ch 9: Algebra: Expressions \& formula | - simplify expressions by collecting like terms <br> - substitute numbers into expressions and formulae <br> - expand and factorise expressions <br> - expand two pairs of brackets <br> - factorise quadratic expressions <br> - rearrange formulae. | EOC Test 9: Algebra: Expressions \& formula <br> Letters to represent numbers, form expressions, collect like terms, substitute, expand and factorise expressions, expand 2 pairs of brackets, factorise quadratics, rearrange formula |
|  | Ch 8: Algebra: Linear graphs | - plot negative coordinates <br> - work out the gradient of a line <br> - draw a straight-line graph from its equation <br> - work out the equation of a linear graph <br> - draw linear graphs parallel to other lines <br> - read information from a conversion graph <br> - use graphs to work out formulae and solve simultaneous linear equations. | EOC Test 8: Algebra: Linear graphs <br> Plot coordinates (negative), gradient of a line, draw line from equation, draw parallel line, conversion graph, solve simultaneous equations graphically |


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| HALF TERM 6 | Ch 10: Ratio, proportion \& rates of change: Ratio, speed and proportion <br> Ch 11: Geometry \& Measures: Perimeter \& Area | - know what a ratio is <br> - divide an amount in a given ratio <br> - calculate speed <br> - solve problems involving direct proportion <br> - compare prices of products. <br> - use letters to represent numbers form simple algebraic expressions <br> - work out the perimeters and areas of rectangles, triangles, parallelograms, trapeziums and compound shapes <br> - calculate the circumference and area of a circle and give your answers in terms of $\pi$. | EOC Test 10 : Ratio, proportion \& rates of change: Ratio, speed and proportion <br> Know what a ratio is, divide in a given ratio, calculate speed, direct proportion, best prices <br> EOC Test 11: Geometry \& Measures: Perimeter \& Area <br> Perimeter \& area of rectangles, triangles, parallelograms, trapeziums and compound shapes, area and circumference of a circle including it terms of $\pi$ |

