| Curriculum Map 2023-24 |  |  |  |  |  |  |
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| Year 9 |  |  |  |  |  |  |
| Halfterm | Unit title with hyperlink to scheme of work | Unit summary | Skills \& content covered | Skills \& content revisited | Summary of formative marking, feedback and student response | Summative assessment schedule, including assessment criteria |
| Autumn 1 | Powers and roots | Number properties including factors, multiples, powers and roots, and extending to indices and surds. | Dependent on group. | Prime factorisation HCF and LCM Standard form Simple index laws | Exit ticket at end of unit - marking informs planning. Sparx Insights informs whole class feedback on homework. |  |
|  | Sequences, functions and graphs | Finding and using nth term rules, making links to linear functions and their graphs. Using $y=m x+c$ and extending to simultaneous equations and functions. |  | Nth term - linear sequences Linear graphs |  |  |
|  | Ratio and decimals | Calculating with decimals, standard form and problem solving with ratio, extending to bounds and similar shapes. |  | Rounding <br> Decimal calculation <br> Ratio |  |  |
| Autumn 2 | Mensuration and calculation | Use of formulae to calculate area and volume of a range of 2D and 3D shapes, extending to working algebraically. | Dependent on group. | Area of 2D shapes Volume of simple prisms | Exit ticket at end of unit - marking informs planning. Sparx Insights informs whole class feedback on homework. | Assessment for PC1 |
|  | Probability | Use a range of diagrams and calculations to deepen understanding of probability, extending to working algebraically. |  | Probability of single events Probability of combined events |  |  |
|  | Expressions and equations | Manipulating algebraic expressions and solving equations and inequalities, extending to simultaneous equations and quadratics. |  | Creating and simplifying expressions <br> Expanding and factorising Solving simple equations |  |  |
| Spring 1 | Angles, shapes and trigonometry | Use of angle facts, Pythagoras theorem and trigonometry to find missing angles and lengths in triangles and shapes made from triangles, extending to advanced trigonometry. | Dependent on group. | Simple angle facts - angles in triangle, quadrilateral, on straight line, vertically opposite. <br> Angles in polygons. Squares and square roots. | Exit ticket at end of unit - marking informs planning. Sparx Insights informs whole class feedback on homework. | Assessment for PC2 |
|  | Quadratics and other curves | Plotting graphs of curves and identifying key features of these graphs, extending to solving quadratic equations using a range of methods. |  | Coordinates <br> Plotting from table of values |  |  |
| Spring 2 | Fractions, decimals and percentages | Calculating with fractions and percentages - with and without calculators, extending to reverse \%, compound \% change and converting recurring decimals to fractions. | Dependent on group. | 4 operations with fractions Fraction and \% of a number Simple\% change | Exit ticket at end of unit - marking informs planning. Sparx Insights informs whole class feedback on homework. |  |
|  | Relationships, graphs and rates of change | Working with compound measures speed, density and pressure and solving proportion problems, extending to formal use of proportion equations. Distancetime graphs and velocity - time graphs, extending to average and instantaneous rates of change. |  | Proportional reasoning Science curriculum |  |  |
| Summer 1 | Handling data | Working with summary statistics and comparing data sets. Displaying and interpreting data using a range of diagrams eg. pie charts, frequency polygons, stem and leaf diagrams, leading to cumulative frequency and histograms. | Dependent on group. | Visual representations of data. <br> Use of averages and range. | Exit ticket at end of unit - marking informs planning. Sparx Insights informs whole class feedback on homework. |  |
|  | Angles and construction | Scale drawings and constructing shapes and loci using rulers, protractors and compasses. Bearings and angles leading to circle theorems. |  | Use of mathematical equipment. Angles |  |  |
| Summer 2 | Transformations and vectors | Transformations-reflection, rotation, enlargement and translation. Working with column vectors, extending to geometry problems with vectors and proof. | Dependent on group. | Symmetry <br> Simple transformations | Exit ticket at end of unit - marking informs planning. Sparx Insights informs whole class feedback on homework. | End of year assessment calculator paper |

