## Long Term Plans: Mathematics

## Threshold concepts

| Number TC1 | Ratio and Proportion TC2 | Algebra TC3 |
| :---: | :---: | :---: |
|  | Probability | Statistics |
|  | TC5 | TC6 |

Within our curriculum design, we have carefully considered how to sequence and interleave the threshold concepts within our subjects so that students are able to build and develop secure schema over time. The table below shows how we have mapped our threshold concepts throughout our Mathematics curriculum.

## Year 7

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N/A | TC3 | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | TC3 | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | TC3 | TC1 | TC1 | N/A |
|  | Orientation | Unit 1 Algebra Algebraic notation Does order matter? | Unit 1 Algebra <br> Substitution <br> Directed numbers? | Unit 1 Algebra <br> Substitution <br> How do you substitute into expressions? | Unit 1 Algebra Simplifying <br> What are like terms? | Unit 1 Algebra Simplifying <br> What is the difference between expanding and factorising? | Unit 1 Algebra Solving <br> Assessments Whole school How do you find $x$ ? | Unit 1 <br> Algebra <br> Solving <br> Assessments <br> - Whole <br> school <br> How do you solve? | Unit 1 Algebra Sequences <br> What is the next number in the sequence? | Unit 1 Algebra Sequences <br> What is the general rule? | Unit 2 Number <br> Place value, inequalities, and ordering <br> Which is bigger? | Unit 2 Number <br> Four operations inc. decimals Data \& Planning days How do we multiply numbers? | Intervention week |
|  |  |  | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Mini Test/WCF |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cycle 2: [NumberCTD and Geometry) | TC1 | TC1 | $\begin{gathered} \text { TC1 } \\ \text { TC3 } \end{gathered}$ | TC1 | TC1 | $\begin{aligned} & \text { TC1 } \\ & \text { TC2 } \end{aligned}$ | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | $\begin{gathered} \text { TC4 } \\ \text { TC1 } \end{gathered}$ | $\begin{aligned} & T C 4 \\ & T C 1 \\ & T C 3 \end{aligned}$ | $\begin{aligned} & \text { TC2 } \\ & \text { TC1 } \end{aligned}$ |
|  | Unit 2 <br> Number <br> Four operations inc. decimals <br> How do you multiply decimals? | Unit 2 Number <br> Factors and multiples <br> What are factors? | Unit 2 Number <br> Factors and multiples <br> What is the difference between a factor and a multiple? | Unit 2 Number Rounding and estimation <br> What units should we use? | Unit 2 Number Rounding and estimation <br> Overestimate or underestimate? | Unit 2 Number <br> Application <br> Maths Assessment What do we use methods to solve nonpositive and decimal number problems? | Unit 3 Geometry Unit conversion <br> How do we read scales? | Unit 3 Geometry Angle types, estimating, draw and measure. <br> Acute, obtuse or reflex? | Unit 3 Geometry Angle facts <br> Angles on a straight line add up to... | Unit 3 Geometry Mixed angle facts <br> How many angle facts apply? | Unit 3 Geometry <br> Reflection of shapes <br> Translation of Shapes | Unit 3 Geometry Rotation of Shapes <br> Enlargements of Shapes | Unit 4 <br> Fractions <br> Fractions of amounts <br> Calculate a fraction of an amount? |
|  |  | Mini Test |  | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Minit Test/WCF |  | Mini Test/WCF | Mini Test |  | Mini Test/WCF |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { TC2 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC2 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & T C 2 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \text { TC2 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & T C 2 \\ & T C 1 \\ & T C 3 \end{aligned}$ | TC2 | TC2 | $\begin{aligned} & \text { TC2 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC2 } \\ & \text { TC1 } \end{aligned}$ | N/A | N/A | $\begin{aligned} & \text { TC2 } \\ & T C 1 \end{aligned}$ | N/A |
|  | Unit 4 <br> Fractions <br> Fraction equivalence <br> What is an improper fraction? | Unit 4 Fractions <br> Four operations with fractions <br> How do we multiply/divide fractions? | Unit 4 <br> Fractions <br> Four <br> operations with fractions <br> How do we add/subtract fractions? | Unit 4 Fractions Compare and order fractions <br> How do you order fractions with different denominators? | Unit 4 Fractions <br> Worded fraction problems <br> Which operation do we apply? | Unit 5 <br> Percentages <br> FDP <br> conversions and Ordering FDP <br> How do you express one amount as a percentage of another? | Unit 5 <br> Percentages <br> FDP <br> conversions and Ordering FDP <br> How do you convert from FDP? | Unit 5 <br> Percentages <br> Percentages of amounts calculator <br> How do you <br> find a percentage of an amount (calculator)? | Revision and Assessments | Revision and Assessments | Unit 5 Percentages <br> Percentage increase and decrease noncalculator <br> How do you find a percentage of an amount (noncalculator)? | Unit 5 <br> Percentages <br> Simple interest <br> What is simple interest? | Intervention Week |
|  | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test/WCF | Mini Test |  |  | Mini Test/WCF | Mini Test |  |

## Year 8

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N/A | $\begin{aligned} & \text { TC5 } \\ & \text { TC6 } \end{aligned}$ | TC6 | TC6 | TC6 | $\begin{aligned} & \text { TC1 } \\ & \text { TC3 } \end{aligned}$ | $\begin{aligned} & \text { TC1 } \\ & \text { TC4 } \end{aligned}$ | $\begin{aligned} & \text { TC1 } \\ & \text { TC4 } \end{aligned}$ | TC1 | TC1 | TC1 | $\begin{aligned} & \hline \text { TC1 } \\ & \text { TC6 } \\ & \text { TC5 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ |
|  | Orientation | Unit 6 - <br> Probability and Statistics <br> Probability scales and simple probability <br> What is the chance of winning the Lottery? | Unit 6 <br> Probability and Statistics Probability NOT and from listing outcomes and frequency trees Why do probabilities add up to 1? | Unit 6 <br> Probability and <br> Statistics <br> Calculating <br> MMMR <br> What does <br> average <br> mean in <br> maths? | Unit 6 <br> Probability and <br> Statistics <br> Simple <br> statistical <br> diagrams <br> Gaps or no gaps? | Unit 6 <br> Probability and Statistics <br> Pie charts <br> Maths Assessment <br> Can you compare pie charts? | Unit 7 <br> Number <br> Index laws | Unit 7 <br> Number <br> Calculating with powers and roots, inc. Pythagoras <br> What is Pythagoras' Theorem? | Unit 7 Number <br> Calculating with powers and roots, inc. Pythagoras <br> What is the longest side of a rightangled triangle called? | Unit 7 Number Standard form <br> What is the point of standard form? | Unit 7 Number Prime factorisation, HCF and LCM <br> What is the difference between LCM and HCF? | Unit 7 Number Sets and Venn diagrams <br> Who invented Venn diagrams? | Unit 8 Algebra Inequalities <br> How do you represent an inequality on a number line? |
|  |  |  | Mini Test/WCF | Mini test | Mini Test/WCF | Mini test | Mini Test/WCF |  | Mini Test | Mini Test/WCF | Mini test | Mini Test/WCF |  |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TC3 | TC3 | TC3 | TC3 | TC3 | TC3 | TC3 | TC4 | TC4 | TC1 | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | TC1 | $N / A$ |
|  | Unit 8 Algebra <br> Complex manipulation <br> What do we mean by making the subject? | Unit 8 Algebra Complex manipulation <br> What does inverse mean? | Unit 8 Algebra <br> Forming and Solving <br> What is a coefficient? | Unit 8 Algebra <br> Forming and Solving <br> Why do we need to solve equations? | Unit 8 Algebra Expanding and factorising binomials <br> What does expanding mean in maths? | Unit 8 Algebra Expanding and factorising binomials <br> What does factorise mean? | Unit 8 Algebra Sequences <br> Assessments Whole School <br> Geometric or arithmetic sequences? | Unit 9 2D Geometry Constructions <br> Assessments <br> - Whole <br> School <br> What is a compass? | Unit 9 2D <br> Geometry <br> Angles in parallel lines <br> What are the differences between corresponding, alternate and co-interior angles? | Unit 9 2D Geometry Unit conversions <br> Metric or imperial? | Unit 9 2D Geometry Area of trapezia and compound shapes <br> What is a compound shape? | Unit 9 2D Geometry Area of trapezia and compound shapes <br> Data \& Planning days <br> What is the formula for finding the area of a trapezium? | Intervention week |
|  | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \hline T C 4 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \hline T C 1 \\ & T C 2 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \hline T C 1 \\ & T C 2 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \hline \text { TC1 } \\ & \text { TC2 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \hline T C 1 \\ & T C 2 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \hline T C 1 \\ & T C 2 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \text { TC1 } \\ & T C 2 \\ & T C 1 \end{aligned}$ | $N / A$ | $N / A$ | $\begin{aligned} & \hline T C 1 \\ & T C 2 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \hline T C 1 \\ & T C 2 \\ & T C 1 \end{aligned}$ | N/A |
|  | Unit 9 2D Geometry Circles <br> What does R17 or R18 or R19 on car tires mean? | Unit 9 2D <br> Geometry <br> Circles <br> What is the formula for the area of a circle? | Unit 10 <br> Proportional <br> Reasoning <br> Percentage of amounts non calc and calc <br> What is a percentage? | Unit 10 <br> Proportional <br> Reasoning <br> Percentage <br> increase/decrease <br> calc <br> Percentages on a calculator? | Unit 10 <br> Proportional <br> Reasoning <br> Percentage <br> increase/decrease <br> non calc and calc <br> When would <br> you see percentage increase/decrea se in the real world? | Unit 10 <br> Proportional <br> Reasoning <br> Reverse <br> percentages <br> What does reverse percentage mean? | Unit 10 <br> Proportional <br> Reasoning <br> Compound <br> interest <br> What's the <br> difference <br> between <br> compound <br> interest and <br> simple <br> interest? | Unit 10 <br> Proportional <br> Reasoning <br> Ratio <br> What is a ratio? | Revision and Assessments | Revision and Assessments | Unit 10 <br> Proportional <br> Reasoning <br> Ratio <br> What does 2:3:4 mean? | Unit 10 <br> Proportional <br> Reasoning <br> Compound <br> measures <br> How do we measure speed? | Intervention Week |
|  | Mini Test/WCF |  | Mini test |  | Mini Test/WCF | Mini test | Mini Test/WCF | Mini Test | Mini Test/WCF |  |  | Min Test | Mini Test/WCF |

## Year 9

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N/A | TC4 | $\begin{gathered} \text { TC4 } \\ \text { TC1 } \end{gathered}$ | $\begin{aligned} & \hline T C 4 \\ & T C 1 \\ & T C 3 \end{aligned}$ | $\begin{aligned} & \hline T C 4 \\ & T C 1 \\ & T C 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline T C 4 \\ & T C 1 \\ & T C 3 \end{aligned}$ | TC6 | TC6 | $\begin{aligned} & \text { TC6 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC6 } \\ & \text { TC1 } \end{aligned}$ | TC6 | TC6 | N/A |
|  | Orientation | Unit 11 3D Geometry Solids' properties, nets, plans, elevations <br> What does plan mean? | Unit 11 3D <br> Geometry <br> Surface area <br> What is a net? | Unit 11 3D <br> Geometry <br> Volume of prisms <br> What is a crosssection? | Unit 11 3D Geometry <br> Volume of cylinders, cones and pyramids <br> What is the area of the base? | Unit 11 3D Geometry Volume of cylinders, cones and pyramids <br> What is a frustum? | Unit 12 Statistics Collecting and organising data <br> What is the key? <br> Assessments - Whole School | Unit 12 Statistics Interpret and compare statistical representations <br> Correlation or causation? <br> Assessments Whole School | Unit 12 Statistics MMMR from a frequency table <br> Why use a frequency table? | Unit 12 <br> Statistics <br> MMMR from a frequency table <br> What is a class interval? | Unit 12 Statistics <br> Frequency diagrams <br> What is a frequency polygon? | Unit 12 <br> Statistics <br> Identifying errors and misconceptions in statistical diagrams <br> How do you question the validity of statistical diagrams? <br> Data \& Planning days | Intervention week |
|  |  |  | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Mini Test/WCF | DIRT | Mini Test/WCF | Mini Test | Mini Test/WCF |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 1 |
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|  | TC3 | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & T C 3 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | TC3 | TC3 | $\begin{gathered} \text { TC4 } \\ \text { TC1 } \end{gathered}$ |
|  | Unit 13 <br> Graphs and <br> Proportion <br> Coordinates and midpoints | Unit 13 Graphs and Proportion Linear functions | Unit 13 Graphs and Proportion Direct/Inverse proportion | Unit 13 Graphs and Proportion Scale | Unit 14 <br> Algebraic Expressions Sequences | Unit 14 <br> Algebraic Expressions Expanding | Unit 14 Algebraic Expressions Factorising <br> Maths | Unit 14 <br> Algebraic <br> Expressions <br> Factorising | Unit 14 Algebraic Expressions Solving | Unit 14 Algebraic Expressions Solving | Unit 14 Algebraic Expressions Transposing Formulae | Unit 14 <br> Algebraic <br> Expressions <br> Transposing <br> Formulae | Unit 15 2D Geometry Constructions and Loci |
|  | How do you find a midpoint? | Linear or nonlinear? | What is proportion? | Why do we use a scale? | What is the nth term? | Expanding triple brackets? | Why do we factorise quadratics? | Difference of two squares? | How can you check the solution is correct? | How many solutions do quadratics equations have? | What does transposition mean? | Why do we factorise when transposing formulae? | What is Loci? |
|  |  | Mini Test/WCF | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF | Mini Test |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { TC4 } \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & T C 3 \\ & T C 4 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & T C 3 \\ & T C 4 \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | TC3 | $\begin{aligned} & \text { TC3 } \\ & T C 1 \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & T C 1 \end{aligned}$ |  |  | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ |  |
|  | Unit 15 2D <br> Geometry <br> Angles in polygons <br> What is the difference between an interior and exterior angle? | Unit 15 2D Geometry Congruency and Similarity <br> What does Congruency mean? | Unit 15 2D Geometry <br> Trigonometry using similar triangles <br> Enlargement on a coordinate grid | Unit 15 2D Geometry <br> Arcs and sectors <br> How do you find the area of a sector? | Unit 16 Algebra Graphs <br> Form and solve inequalities <br> What is the difference between solving an equation and solving an inequality? | Unit 16 <br> Algebra Graphs <br> Graphing inequalities and identifying regions <br> How do we represent inequalities on a graph? | Unit 16 <br> Algebra Graphs <br> Simultaneous equations <br> How do we eliminate terms? | Unit 16 <br> Algebra Graphs <br> Simultaneous equations <br> Why is it called simultaneous equations? | Unit 16 Algebra Graphs <br> Quadratic graphs <br> What is the difference between a positive and negative quadratic graph? | Revision and Assessments | Revision and Assessments | Unit 16 Algebra Graphs <br> Other algebraic graphs <br> What does a reciprocal graph look like? | Intervention Week |
|  |  | Mini Test/WCF | Mini Test |  | Mini Test/WcF |  | Mini Test/WCF |  | Mini Test/WCF |  |  |  | Mini Test/WCF |

## Year 10

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N/A | TC4 | TC4 | TC4 | TC4 | TC4 | $\begin{aligned} & \hline \text { TC4 } \\ & \text { TC1 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline T C 4 \\ & T C 1 \\ & \hline \end{aligned}$ | TC5 | TC6 | TC6 | TC6 | TC6 |
|  | Orientation | Unit 17 Triangles and <br> Transformations <br> Pythagoras' <br> theorem inc. 3D <br> What is Pythagoras theorem? | Unit 17 Triangles and <br> Transformations Pythagoras' theorem inc. 3D <br> What is a hypotenuse? | Unit 17 Triangles and <br> Transformations Trigonometry <br> What are the trigonometric ratios? | Unit 17 Triangles and <br> Transformations <br> Trigonometry (inc. graphs) <br> What are the exact trigonometric values? | Unit 17 Triangles and <br> Transformations Reflection, translation, and rotation <br> What is translation in mathematics? | Unit 17 Triangles and <br> Transformations Enlargement, inc. negative and fractional <br> How does a negative and fractional scale factor change an enlargement? | Unit 17 Triangles and <br> Transformations Mixed transformation <br> What are the four types of transformations? | Unit 18 <br> Probability and Statistics <br> Experimental probability and Probability of combined events <br> What is the AND \& OR rule in probability? | Unit 18 <br> Probability <br> and <br> Statistics <br> MMMR <br> from a <br> frequency <br> table <br> How do we find a mean from a frequency table? | Unit 18 <br> Probability and Statistics <br> Cumulative frequency and box plots <br> What does a cumulative frequency graph look like? | Unit 18 Probability and Statistics Cumulative frequency and box plots CTD <br> What is a box plot? | Unit 18 <br> Probability and <br> Statistics <br> Compound measures <br> What is a compound measure? |
|  |  |  | Mini Test/WCF |  | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TC3 | TC3 | TC3 | TC3 | TC3 | TC1 | TC1 | $\begin{gathered} \text { TC1 } \\ \text { TCA } \end{gathered}$ | $\begin{aligned} & \text { TC1 } \\ & \text { TCA } \end{aligned}$ | TC4 | TC4 | TC5 | $N / A$ |
|  | Unit 19 <br> Algebra <br> Graphs <br> Line <br> segments <br> What is a segment? | Unit 19 Algebra Graphs <br> Equation of a line from coordinates <br> What is the gradient? | Unit 19 Algebra <br> Graphs <br> Parallel and perpendicular lines <br> What is the difference between parallel and perpendicular? | Unit 19 Algebra Graphs <br> Sketching quadratics <br> What is the trapezium rule? | Unit 19 Algebra Graphs Gradient of and area under curves <br> What is a tangent? | Unit 20 Limits and 3D Geometry <br> Estimation <br> What is a significant figure? | Unit 20 Limits and 3D Geometry Bounds of accuracy <br> Assessments Whole School <br> How do we calculate a lower and upper bound? | Unit 20 Limits and 3D Geometry <br> Volume and S.A <br> Assessments <br> - Whole <br> School <br> How do we <br> find the <br> surface <br> area of a <br> prism? | Unit 20 Limits and 3D Geometry <br> Volume and S.A <br> How do we find the volume of a prism? | Unit 20 Limits and 3D <br> Geometry <br> Plans and <br> Elevations <br> Where are plans and elevations used in the real world? | Unit 20 Limits and <br> 3D Geometry <br> 3D Geometry <br> Applications <br> Adjacent, Opposite or Hypotenuse? | Unit 21 <br> Probability <br> Outcomes inc. product rule and sample space <br> Data \& Planning days <br> Product rule for counting? | Intervention week |
|  |  | Mini Test/WCF | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Mini Test/WCF | Mini Test |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cycle 3: [Probability and Number] | TC6 | $\begin{aligned} & \text { TC6 } \\ & \text { TC5 } \end{aligned}$ | TC5 | TC5 | TC1 | TC1 | TC1 | $\begin{aligned} & T C 1 \\ & T C 2 \end{aligned}$ | TC1 | $N / A$ | $N / A$ | $\begin{aligned} & T C 1 \\ & T C 2 \end{aligned}$ | $N / A$ |
|  | Unit 21 <br> Probability <br> Understanding and using sampling <br> Is it fair? | Unit 21 <br> Probability <br> Venn diagrams <br> How do we find probabilities from a Venn Diagram? | Unit 21 <br> Probability <br> Probability of combined events <br> What is the AND and OR rule in probability? | Unit 21 <br> Probability <br> Conditional probability <br> How can one probability affect another? | Unit 22 Number <br> Index laws inc. equations, fractional and negative <br> What are the index laws? | Unit 22 <br> Number <br> Standard form calculations <br> What are the principles of standard form? | Unit 22 <br> Number <br> Standard form calculations <br> Standard <br> form on a calculator? | Unit 22 <br> Number <br> Interest inc. growth and decay <br> Growth or Decay? | Unit 22 <br> Number <br> Surds <br> What is a surd? | Revision and Assessments | Revision and Assessments | Unit 22 <br> Number <br> Ratio <br> What does it mean to put a ratio in the form 1:n? | Intervention <br> Week |
|  |  | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF |  |  | Mini Test |

## Year 11

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
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|  | Orientation | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC3 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \\ & \text { TC3 } \end{aligned}$ | $\begin{aligned} & \hline \text { TC4 } \\ & \text { TC1 } \\ & \text { TC3 } \end{aligned}$ | N/A | N/A | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ | $\begin{aligned} & \text { TC4 } \\ & \text { TC1 } \end{aligned}$ |
|  |  | Unit 23 Algebra <br> Algebraic <br> Fractions <br> What are the similarities between manipulating fractions and algebraic fractions? | Unit 23 Algebra <br> Solving quadratic equations <br> Why do we factorise? | Unit 23 <br> Algebra <br> Solving quadratic equations <br> What is the discriminant and why is it so useful? | Unit 23 Algebra <br> Quadratic <br> graphs <br> What are the properties of quadratic curves? | Unit 23 Algebra <br> Non-Linear <br> Simultaneous <br> Equations <br> How solutions can, you get when solving quadratic simultaneous equations? | Unit 23 <br> Algebra <br> Functions <br> What does <br> $f g(x)$ mean? | Unit 24 2D <br> Geometry <br> Trig inc. <br> SOGCAHTOA, <br> 3D, sine and cosine rule, area <br> What is the Cosine rule? | Unit 24 2D <br> Geometry <br> Trig inc. SOGCAHTOA, 3D, sine and cosine rule, area <br> How do we find the area using the cosine rule? | Mock <br> Examinations <br> 1 | Mocks Examinations 1 | Unit 24 2D <br> Geometry Loci <br> Is Loci applicable to the real world? | Unit 24 2D <br> Geometry <br> Bearings (including with trig) <br> How do you combine trigonometry and bearings? |
|  |  |  | Mini Test/WCF |  | Mini Test | Mini Test/WCF | Mini Test | Mini Test/WCF |  | Mini Test/WCF |  |  | Mini Test/WCF |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 1 |
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|  | $\begin{aligned} & \hline \text { TC4 } \\ & \text { TC1 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { TC4 } \\ & \text { TC1 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { TC1 } \\ & \text { TC3 } \end{aligned}$ | $\begin{aligned} & \hline \text { TC1 } \\ & \text { TC3 } \end{aligned}$ | $\begin{aligned} & \hline \text { TC1 } \\ & \text { TC3 } \end{aligned}$ | $\begin{aligned} & \hline \text { TC1 } \\ & \text { TC3 } \end{aligned}$ | N/A | N/A | $\begin{aligned} & \hline \text { TC1 } \\ & \text { TC3 } \end{aligned}$ |  |  |  |  |
|  | Unit 24 2D Geometry Vectors inc. column and vector geometry <br> What are vectors? | Unit 24 2D Geometry Vectors inc. column and vector geometry <br> Can you combine vectors, if so why? | Unit 25 Number and Algebra Circle Theorems <br> What are the different circle theorems? | Unit 25 Number and Algebra <br> Function Transformations <br> How do you reflect a graph in the $y$-axis? | Unit 25 Number and Algebra <br> Graphing Proportion <br> What is proportion? | Unit 25 <br> Number and Algebra Iteration and Recursion <br> What is iteration and recursion? | Examinations Mocks 2 | Examinations Mocks 2 | Unit 25 <br> Number and <br> Algebra <br> Algebraic and Geometric Proof <br> What are the different types of proof? | Revision | Revision | Revision | Revision |
|  |  | Mini Test/WCF |  | Mini Test/WCF | Mini Test | Mini Test/WCF | Mini Test |  |  | Mini Test/WCF |  |  |  |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 |
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|  | Revision | Revision | Revision | Revision | Revision | Examinations | Examinations | $\begin{aligned} & \text { Examinations } \\ & \text { P1 } \end{aligned}$ | $\begin{aligned} & \hline \text { Examinations } \\ & \text { P2 } \end{aligned}$ | $\begin{aligned} & \hline \text { Examinations } \\ & \text { P3 } \end{aligned}$ |  |  |  |

