

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Imagine and visualise a negative number line. • Formulate real-life graphs. • Compose algebraic expressions. • Develop techniques for converting between metric units.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Determine which quadrant a coordinate lies in. • Determine which formula to use when calculating the area of different 2D shapes. • Assess whether to round up or down with integers and decimals. • Determine comparisons between different fractions.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Investigate bar charts. • Prioritise the order of operations. • Analyse sets of data using averages and range. • Organise data using tally charts.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Calculate averages and range. • Use the four operations. • Identify prime numbers. • Use times tables to help you divide.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Understand and use frequency tables. • Give examples of square and cube numbers. • Explain the difference between perimeter and area. • Estimate with approximate values.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Recall multiplication facts up to 10 x 10. • Recognise and extend number sequences by counting in decimals. • Recognise parallel and perpendicular lines. • Label lines and angles.

<p> Create hypothesise formulate design imagine compose develop improve </p>	<ul style="list-style-type: none"> • Create different types of chart and graph. • Imagine 2D representations of 3D shapes. • Design a data collection sheet. • Formulate the nth term of arithmetic sequences.
<p> Evaluate recommend persuade debate justify assess conclude determine </p>	<ul style="list-style-type: none"> • Determine the difference between expressions and equations. • Determine the HCF and LCM of 2 numbers. • Justify angle calculations with reasons. • Determine relative frequency from practical events.
<p> Analyse infer research investigate question appraise examine prioritise organise </p>	<ul style="list-style-type: none"> • Organise fractions into size order using equivalence. • Examine pie charts to make comparisons. • Infer the probability of an event. • Organise multiplication and division calculations.
<p> Apply demonstrate manipulate calculate practise identify use </p>	<ul style="list-style-type: none"> • Use proportion and proportion to solve simple problems. • Calculate the volume and surface area of cubes and cuboids. • Calculate percentages. • Demonstrate prime factor decomposition.
<p> Understand explain interpret give examples estimate illustrate </p>	<ul style="list-style-type: none"> • Interpret pie charts. • Determine the difference between expressions and equations. • Give examples of equivalent fractions. • Estimate the size of angles.
<p> Remember list recognise define recall label </p>	<ul style="list-style-type: none"> • Recall all square numbers to 16^2. • Recognise, describe and continue number sequences. • Label different types of graphs. • List factors and multiples.

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Formulate algebraic expressions and formulae to represent real life scenarios. • Develop techniques for converting between metric units. • Formulate conclusions based on the results of an experiment. • Develop a systematic approach to angle reasoning.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Determine which formula to use when calculating the area of different 2D shapes. • Evaluate decimal multiplication mentally. • Justify equivalence with fractions. • Determine the nth term of a sequence.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Examine problems involving time and money using a calculator. • Prioritise the order of operations when substituting values into formulae. • Investigate the link between fractions, proportion and ratio. • Investigate the effects of $y=mx+c$.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Calculate averages and range. • Use square numbers, square roots and triangle numbers. • Demonstrate how to round decimals to the nearest whole number. • Manipulate algebraic expressions.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Interpret bar charts. • Interpret a calculator display. • Understand factors multiples and primes. • Understand where to position the decimal point by considering equivalent calculations.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Recall multiplication facts up to 10×10. • Recall the language of probability. • Label a probability scale. • List probability outcomes.

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Design a grouped frequency table using inequality notation. • Design questionnaires. • Design and use data collection sheets and tables. • Derive and use the formula for the area of a triangle.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Determine unknown angles by forming and solving equations. • Determine which average to use to represent a set of data. • Recommend improvements that could be made to graphs and charts that contain errors. • Evaluate the solutions to formulae that contain indices.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Organise workings and reasoning when calculating missing angles. • Analyse scatter graphs to be able to compare data sets. • Prioritise calculations when solving equations. • Examine formulae and be able to rearrange to change the subject.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Use index notation. • Use written methods to add and subtract decimals. • Calculate with squares, cubes and roots. • Identify the correct angle rule to use.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Estimate answers to calculations. • Interpret pie charts. • Estimate the square root of a number. • Understand and simplify algebraic powers.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Recognise and name the different 2D shapes. • Label graph correctly. • Recall equivalent fractions, decimals and percentages. • Recognise recurring and terminating decimals.

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Create tables of results for straight line graphs. • Create expressions using four operations. • Formulate formulae from a description. • Develop their understanding of solving equations to include unknown on both sides.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Evaluate solutions to word problems using squares and square roots. • Examine expressions and be able to factorise. • Determine the nth term of a geometric sequence. • Determine the correct formulae to use for calculating area.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Organise different proportions using percentages. • Investigate the effects of $y = mx + c$. • Examine the difference between the graphs of $y = x$ and $y = -x$. • Organise workings for solving equations into a logical order.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Identify sources of primary and secondary data. • Use two-way tables. • Use mental and written strategies for multiplication. • Use index notation for squares and square roots.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Interpret and draw dual bar charts and compound bar charts. • Understand how to reduce bias in sampling and questionnaires. • Interpret and draw line graphs. • Understand the difference between multiples, factors and primes.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Recognise when a graph is misleading. • Recall properties of quadrilaterals and triangles. • Label diagrams with their properties. • Recall the conversions between different metric units.

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Create accurate diagrams to solve problems. • Compose and solve equations. • Develop an understanding of straight-line graphs. • Design and use two-way tables.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Evaluate the volume and surface area of a cylinder. • Determine the radius or diameter of a circle when you know its circumference. • Use estimated probability to determine expected frequencies. • Assess if lines are parallel or perpendicular.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Examine if a graph is misleading. • Organise all the possible outcomes of one or two events in sample space diagrams or Venn diagrams. • Investigate the effect of changing the gradient or intercept of a straight line. • Analyse distance-time graphs to solve problems.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Use prime factor decomposition to find the HCF or LCM of two numbers. • Calculate with powers. • Identify congruent and similar shapes. • Use similarity to solve problems in 2D shapes.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Understand the meaning of an identity. • Explain the effect of multiplying and dividing by any integer power of 10. • Use and interpret scale drawings. • Estimate probability using data from an experiment.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Recall the formula for the circumference and area of a circle. • Recall fractional equivalents to important recurring decimals. • Recognise when values are in direct proportion. • Remember which denominators of simple fractions produce recurring decimals.

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Design data-collection sheets for grouped, discrete and continuous data, use inequalities for grouped data, and introduce \leq and \geq signs. • Formulate expressions and formulae from given information and then substitute values into them. • Design two-way tables for discrete and grouped data. • Develop understanding of the 4 operations with fractions and ensure most efficient method is utilised.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Evaluate expressions involving squares, cubes and roots. • Persuade others mathematically that algebraic expressions are equivalent. • Justify why a sample may not be representative of a whole population. • Determine the size of fractions and justify why one is larger than the other using equivalent fractions.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Specify the problem, plan an investigation, decide what data to collect and what statistical analysis is needed, consider fairness. • Examine numbers and be able to round them specified decimal places or significant figures. • Examine prime factor decomposition of numbers to find the HCF and LCM. • Prioritise steps of workings for simplifying expressions, including those with brackets and indices.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Use and order positive and negative numbers. • Identify the value of digits in a decimal or whole number. • Identify factors, multiples and prime numbers. • Use algebraic notation and symbols correctly.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Estimate answers to calculations by rounding numbers to 1 significant figure. • Understand the relationship between ratio and proportion. • Understand the difference between an expression and an equation and identify the unknown in an equation. • Interpret tables; represent data in tables and charts.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Recall all multiplication facts to 10×10 and use them to derive quickly the corresponding division facts. • Recognise powers of 2, 3, 4, 5. • Recognise factors of algebraic terms involving single brackets. • Label graphs and charts to ensure all information is given.

<p> Create hypothesise formulate design imagine compose develop improve </p>	<ul style="list-style-type: none"> • Create and interpret time–series graphs and use moving averages to comment on trends. • Design frequency diagrams for grouped discrete data. • Create and interpret grouped frequency tables for continuous data.
<p> Evaluate recommend persuade debate justify assess conclude determine </p>	<ul style="list-style-type: none"> • Determine the value of numerical expressions involving multiplication and division of integer powers, fractional and negative powers, and powers of a power. • Determine which charts to use for different types of data sets. • Assess the advantages and disadvantages of different measures of average.
<p> Analyse infer research investigate question appraise examine prioritise organise </p>	<ul style="list-style-type: none"> • Understand that correlation does not infer causality, and appreciate that correlation is a measure of the strength of the association between two variables and that zero correlation does not necessarily infer ‘no relationship’ but merely ‘no linear correlation. • By writing the denominator in terms of its prime factors, investigate whether fractions can be converted to recurring or terminating decimals. • Organise, sort, classify and tabulate data and discrete or continuous quantitative data.
<p> Apply demonstrate manipulate calculate practise identify use </p>	<ul style="list-style-type: none"> • Use instances of index laws, including use of zero, fractional and negative powers. • Identify which terms cannot be in a sequence by finding the nth term. • Calculate mean and range, find median and mode from small data set.
<p> Understand explain interpret give examples estimate illustrate </p>	<ul style="list-style-type: none"> • Estimate the mean with grouped data. • Explain an isolated point on a scatter graph. • Interpret scatter graphs in terms of the relationship between two variables.
<p> Remember list recognise define recall label </p>	<ul style="list-style-type: none"> • Find the LCM and HCF of two numbers by listing factors and multiples of the numbers. • Recognise the advantages and disadvantages between measures of average. • Recall that $n^0 = 1$ and $n^{-1} = 1/n$ for positive integers.

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Create formula and equations to represent mathematical situations and use the to solve problems. • Combine the effects of different transformations into a single transformation with the same net effect. • Arrange data in tables, lists and Venn Diagrams and use these to produce resulting probabilities.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Evaluate size of angles by estimation and measuring with a protractor. • Determine patterns in sequences and use these to produce nth term rules. • Justify step-by-step reasons behind the use of angle facts to solve problems in 2D shapes and parallel lines.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Use facts of 2D shapes and parallel lines to infer solutions to angle problems. • Rearrange formula by prioritising order of operations in algebraic context. • Organise 2D drawing of nets of 3D shapes and use to calculate Total Surface Area. • Examine the links between trigonometric ratios; sides and angles including exact values using surds.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Identify Lines of symmetry and order of Rotational Symmetry. • Find and use internal and external angles. • Demonstrate inequalities by drawing number lines and Identify them from number lines. • Calculate terms in sequences using nth term rules. • Move between different metric units by applying different conversion rates.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Explain congruence and similarity of shapes. • Understand the different units used for mass, time, length, area & volume. • Interpret real life graphs and use them to illustrate real life situations. • Understand the links between ratio and proportion and use this in contexts involving quantities.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Label parallel and perpendicular lines, and name particular angles. • Recognise the difference between terms, formulae, equations and identities. • Recall and use formula for area and perimeter of 2D shapes. • Recall and use Pythagoras and Trigonometry formulae used to solve triangle problems.

<p> Create hypothesise formulate design imagine compose develop improve </p>	<ul style="list-style-type: none"> • Develop an understanding of quadratics to ensure the correct method is being used to solve equations. • Create probability trees for independent and conditional events. • Create equations to solve word and other problems involving direct and inverse proportion. • Formulate the relationships between linear, area and volume scale factors of mathematically similar shapes and solids.
<p> Evaluate recommend persuade debate justify assess conclude determine </p>	<ul style="list-style-type: none"> • Determine the values of non-calculator trigonometric calculations. • Determine the equation of straight-line graphs. • Evaluate volume and surface area of compound 3D shapes. • Justify whether probability events are independent or conditional.
<p> Analyse infer research investigate question appraise examine prioritise organise </p>	<ul style="list-style-type: none"> • Analyse information presented in a range of linear graphs. • Recognise a linear, quadratic, cubic, reciprocal and circle graph from its shape. • Recognise and sketch nets of cuboids and prisms. • Recognise and describe the four transformations.
<p> Apply demonstrate manipulate calculate practise identify use </p>	<ul style="list-style-type: none"> • Use a graph to find the value of k in $y = kx$. • Apply the trigonometric ratios to find angles and lengths in general triangles and 2D figures. • Calculate the angles of regular polygons and use these to solve problems. • Identify and interpret the gradient of a line segment.
<p> Understand explain interpret give examples estimate illustrate </p>	<ul style="list-style-type: none"> • Understand 'regular' and 'irregular' as applied to polygons. • Understand angle rules of 2D shapes and parallel lines. • Estimate the number of times an event will occur, given the probability and the number of trials. • Interpret graphs of the trigonometric functions (in degrees).
<p> Remember list recognise define recall label </p>	<ul style="list-style-type: none"> • Recognise that equations of the form $y = mx + c$ correspond to straight-line graphs in the coordinate plane. • List all outcomes for single events and combined events systematically. • Recognise when values are in direct proportion by reference to the graph form. • Recognise and sketch graphs of the trigonometric functions (in degrees).

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Imagine and draw front and side elevations from 3D solids. • Improve their understanding of quadratic equations so they know when to solve graphically or algebraically. • Compose simultaneous equations to represent a situation. • Develop ideas on solve problems involving similar shapes.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Evaluate the surface area and volume of composite solids including spheres, pyramids and cones. • Determine which rule to use when confirming congruence. • Conclude which regions satisfy a combination of loci. • Determine which index laws to use to simplify and calculate.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Examine graphs to find their approximate solutions. • Investigate Similar shapes. • Recognise a linear, quadratic, cubic, reciprocal and circle graph from its shape.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Calculate sum of two, difference of two and scalar multiples of vectors. • Practice constructing perpendicular bisectors, angle bisectors and $40/90^\circ$ angles. • Identify and sketch planes of symmetry of 3D solids. • Manipulate formulae to change the subject.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Understand and use compound measures. • Interpret a calculator display using standard form. • Explain why two triangles are congruent. • Estimate lengths using a scale diagram.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Define a quadratic expression. • Recall formulae for area and circumference of a circle. • Recognise and sketch cubic and reciprocal functions. • Label the parts of a circle.

Create hypothesise formulate design imagine compose develop improve	<ul style="list-style-type: none"> • Create and solve a simultaneous equation from a word-based problem. • Create an iterative formula by rearranging a given formula. • Formulate the nth term of linear, quadratic and geometric sequences.
Evaluate recommend persuade debate justify assess conclude determine	<ul style="list-style-type: none"> • Justify angle calculations by using the rules of circle theorems. • Determine if two sets of values are in direct/inverse proportion. • Determine the estimated mean and median from a histogram.
Analyse infer research investigate question appraise examine prioritise organise	<ul style="list-style-type: none"> • Investigate the effect of transformations of graphs. • Examine the effect of combining vectors. • Question how reliable/representative sources of data are and understand how to eliminate bias.
Apply demonstrate manipulate calculate practise identify use	<ul style="list-style-type: none"> • Calculate the area, sides or angles of any triangle. • Use charts and graphs to represent statistics including histograms and cumulative frequency diagrams. • Identify the roots from a quadratic graph/equation.
Understand explain interpret give examples estimate illustrate	<ul style="list-style-type: none"> • Interpret box plots to find medians and quartiles and draw conclusions. • Understand how to calculate the equation of a tangent to a circle by using perpendicular gradients. • Interpret the gradient of linear or non-linear graphs.
Remember list recognise define recall label	<ul style="list-style-type: none"> • Recall the trigonometric relationships and Pythagoras' theorem including 3D shapes. • Recognise graphs of proportionality. • Define types of data, samples and populations.