

|  | Number | Algebra | Geometry | Data and probability |
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| Excelling | - Can order decimals of any size <br> - Can subtract, add, multiply and divide any decimal <br> - Round to any number of decimal places <br> - Find the perimeter and area of composite shapes, including ones with missing measurements <br> - Find the factors of any number up to 100 and multiples of a number <br> - Can multiply and divide mixed numbers <br> - Can find the fraction of a quantity involving decimal answers <br> - Understands the equivalence of FDP and uses this to | - Can simplify expressions involving powers and negatives <br> - Can form a simple algebraic expression from a word problem <br> - Can expand single brackets and simplify the result when more than 1 is involved in the question <br> - Can factorise a linear expression by taking out whole numbers <br> - Can work out a term to term rule in a sequence involving decimals and negatives, can find missing terms of a sequence | - Find the perimeter and area of composite shapes involving triangles, rectangles and parallelograms including ones with missing measurements <br> - Can measure and draw acute, obtuse and reflex angles <br> - Can reflect a shape in a diagonal line | - Can calculate the mean and understand when it would be appropriate to use it <br> - Can draw and interpret a pie chart |


|  | calculate a range of percentages |  |  |  |
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| Securing | - Understands place value and can order numbers to 2 decimal places <br> - Add and subtract decimals to 2 dp and in the context of money <br> - Can round to 1 decimal place <br> - Find factors and multiples of numbers less than 20 <br> - Can convert between improper fractions and mixed numbers <br> - Can find a fraction of a quantity <br> - Can find \% with and without a calculator | - Can simplify expression involving 2 variables <br> - Can expand a single bracket <br> - Can write a term to term rule for simple linear sequences | - Find the area and perimeter of rectangles and composite shapes with given measurements <br> - Find the area of a triangle and parallelogram <br> - Can measure and draw acute and obtuse angles <br> - Can reflect in a vertical and horizontal line | - Calculate the mean of a data set and understand what it tells us <br> - Can draw a bar chart and interpret a pie chart |
| Developing | - Can order number up 1000 <br> - Can add and subtract any 2 or 3 digit number | - Can simplify an expression involving 1 variable <br> - Can write the nest term in a linear | - Find the area and perimeter of a rectangle | - Calculate the mean of 6 numbers and less <br> - Can interpret information from a |



|  | Number | Algebra | Geometry | Data |
| :---: | :---: | :---: | :---: | :---: |
| Excelling | - Can find the HCF and LCM of more than two numbers <br> - Add, subtract, divide and multiply mixed numbers <br> - Convert units involved in area calculations <br> - Can use multipliers for \% increase, decrease and reverse \% questions <br> - Can use ratio in problem solving <br> - Use significant figures to estimate a sum <br> - Can use index rules involving several letters and numbers | - Can solve a range of equations involving brackets and unknowns on both sides <br> - Simplify expressions that involve multiplication and division <br> - Find the nth term of an increasing or decreasing linear sequence | - Construct triangles and quadrilaterals using compass and protractors <br> - Can bisect a line and an angle <br> - Can calculate angles on parallel lines <br> - Can find the area of composite shapes involving circles, trapezium, parallelogram and triangles <br> - Can find the volume and surface area of prisms | - Find the mean, mode, median and range and be aware of when to use each average <br> - Draw a scattergraph and identify outliers <br> - Understand correlation and use a line of best fit to make predictions |
| Securing | - Can prime factorise a number <br> - Can use a venn diagram to find the HCF and LCM of two numbers | - Can solve linear equations that involve a simple bracket <br> - Simplify expressions that involve multiplication | - Can construct triangles using compass and protractor <br> - Can calculate missing angles in parallel lines | - Find the mean, mode and median from a data set <br> - Read a range of statistical diagrams to get information <br> - Draw a pie chart |




|  | Number | Algebra | Geometry | Data and probability |
| :---: | :---: | :---: | :---: | :---: |
| Excelling | - Solve range of mathematical problems involving negative numbers <br> - Understand index rules and work with a combination of several rules <br> - Can apply fraction work to problem solving <br> - Can use multipliers for reverse \% and repeated \% change <br> - Can convert a recurring decimal into a fraction <br> - Do calculations with numbers in standard form | - Plot a range of graphs in the form $y=m x+c$ and understand about gradient and y intercept. Plot and recognise quadratic graphs <br> - Find an nth term for a linear sequence and quadratic sequence <br> - Can expand up to 3 brackets <br> - Form and solve a range of linear equations <br> - Solve equations involving brackets and unknowns on both sides <br> - Solve a range of inequalities and show a region on a graph that satisfies two or more inequalities <br> - Form and solve a pair of simultaneous | - Solve problems involving angles on parallel lines <br> - Find the volume and surface area of a range of prisms <br> - Rotate, reflect, enlarge, and translate a shape and use a combination of transformations <br> - Use trigonometry and Pythagoras to find missing sides and angles <br> - Use a range of constructions to find regions | - Find the mean, mode, median of grouped data (continuous and discrete) <br> - Draw a cumulative frequency curve and scatter graph <br> - Find the arc length and area of a sector. Find missing dimensions if given the answer |


|  |  | equations <br> algebraically |  |  |
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| Securing | - Add, subtract, multiply and divide negative numbers <br> - Know the 3 rules for indices <br> - Add, subtract, multiply and divide mixed numbers <br> - Use a multiplier for \% increase and decrease <br> - Can convert a fraction into a decimal by division <br> - Convert a small or large number into standard | - Plot graphs in the form of $y=m x+c$ <br> - Find an nth term for a linear sequence and can produce a simple quadratic sequence given its nth term <br> - Can expand single and double brackets <br> - Solve a range of inequalities and show the region on a graph that satisfies a single inequality <br> - Solve 2 simultaneous equations by drawing graphs | - Identify corresponding, alternate. Opposite and interior angles <br> - Find the volume and surface area of cuboids <br> - Find the volume of prisms <br> - Rotate, reflect, enlarge, and translate a shape <br> - Use Pythagoras to find a missing side <br> - Bisect a line and an angle and construct triangles | - Find the mean of grouped discrete data <br> - Draw a scatter graph and pie chart <br> - Find the area and circumference of a circle |
| Developing | - Can work with negative number below 20 <br> - Know a range of square number, cube numbers and their roots <br> - Add and subtract mixed numbers. | - Plot co-ordinates in all 4 quadrants, plot graphs in the form $x=a$ and $y=b$ <br> - Can expand a single bracket involving a letter or a number | - Understand the notation used for parallel lines <br> - Find the area of rectangles, triangles, parallelograms, and trapezium | - Find the mean, mode, median and range of a data set <br> - Can draw a bar chart and read from a pie chart <br> - Can label the parts of a circle |


|  | - Find the \% of a number with and without a calculator <br> - Convert between fraction , decimal and \% <br> - Write a large number in standard form | - Can describe term to term rules for a range of sequences <br> - Solve a simple two stage equation <br> - Solve a range of inequalities | - Reflect, rotate, and translate a shape <br> - Draw and measure angles accurately |  |
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| Emerging | - Can recognise negative numbers in context such as temperature <br> - Can list some square and cube numbers <br> - Can convert between improper fractions and mixed numbers <br> - Understand the equivalence of \%, fraction and decimal for $25 \%, 50 \%$ and $75 \%$ <br> - Understand place value for up to 2 decimal places <br> - Multiply a number by 10,100,1000 | - Read and write co-ordinates <br> - Can predict the next term of a simple linear sequence, identify simple sequences such as odd and even numbers <br> - Expand a simple bracket with a number outside <br> - Solve a one stage equation <br> - Understand inequality signs | - Find the area and perimeter of a rectangle <br> - Understand line symmetry and rotational symmetry <br> - Recognise acute, obtuse and reflex angles | - Find the mode and range of data <br> - Can draw and read from a pictogram and a bar chart |

