QPS: Year 3 Mathematics end of year goals (based on statutory and non-statutory DFE mathematical guidance and the DFE Ready to Progress Criteria)

Number and Place Value	Addition and Subtraction	Multiplication, Division	Fractions	Measurement	Geometry Properties of Shape Position, Direction & Motion	Statistics
Reasoning and problem solving	**Reasoning and problem solving**	**Reasoning and problem solving**	**Reasoning and problem solving**	**Reasoning and problem solving**	**Reasoning and problem solving**	**Reasoning and problem solving**
Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. **Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)** **Compare and order numbers up to 1000** **Identify, represent and estimate numbers using different representations** **Read and write numbers up to 1000 in numerals and in words** **Solve number problems and practical problems involving these ideas.** Round any number to the nearest 10 and 100.	**Add and subtract numbers mentally, including:** ▪ **a three-digit number and ones** ▪ **a three-digit number and tens** ▪ **a three-digit number and hundreds** **Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction** **Estimate the answer to a calculation and use inverse operations to check answers** **Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.** Complements to 100. Solve one and two step problems involving all four operations.	**Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables** **Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times and divided by one-digit numbers, using mental and progressing to formal written methods** **Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.** Count in 6s, 7s, 9s, 11s, 12s Doubling facts of multiples of 10 up to double 100. Connect 2x, 4x, 8x through doubling. Understand scaling a number by a scale factor (ie. Four times as tall, 3 times as long). Understand remainders in the context of division.	**Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10** **Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators** **Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators** **Recognise and show, using diagrams, equivalent fractions with small denominators** **Add and subtract fractions with the same denominator within one whole (for example, 5/7 + 1/7 =6/7)** **Compare and order unit fractions, and fractions with the same denominators** **Solve problems that involve all of the above.** Decimals – link to money. ie: tenths / hundredths Read, write, order and compare numbers up to one decimal place Complement of 1 to 1d.p. (2dp with money) Count in fifths, tenths, hundredths Find unit fractions of amounts.	**Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)** **Measure the perimeter of simple 2-D shapes** Comparison of measures includes simple scaling by integers (eg. Twice as long, fives times as high). **Add and subtract amounts of money to give change, using both £ and p in practical contexts** Multiplication and division of money **Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks** **Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight** **Know the number of seconds in a minute and the number of days in each month, year and leap year** **Compare durations of events [for example to calculate the time taken by particular events or tasks].**	**Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them** **Recognise angles as a property of shape or a description of a turn** **Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle** **Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.**	**Interpret and present data using bar charts, pictograms and tables** **Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.**