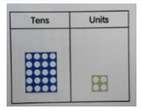
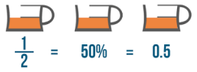
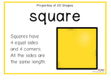
Curriculum Connection
Subject Strands

Strand	Pre KS1	KS1	KS2	KS3
Addition and Subtraction 	Pupils learn about more and less, which allows them to compare two given numbers of objects.	Pupils develop their knowledge of mathematical symbols and number patterns to complete addition and subtraction of 2 digit numbers.	Pupils progress to add and subtract 4 digit numbers as well as solve multi step problems.	Pupils gain a high level of understanding of addition and subtraction allowing them to complete enquiry based problems.
Number Place Value 	Pupils gain a strong understanding of 1:1 correspondence and can count up to 10 objects.	Pupils learn how to count, compare and order numbers to at least 100.	Pupils progress to recognise, order and compare numbers up to 10,000,000 as well as being able to round to a power of 10.	Pupils develop the ability to compare numbers in standard form and use approximations by rounding to estimate an answer.
Multiplication and Division 		Pupils develop the ability to count in 2's, 5's and 10.s. They will make connections between the 10 times table and place value.	Pupils develop their skills to multiply and divide 4 digit numbers by a 1 digit number. They will recognise and use squares and cubes.	Pupils progress to be able to use integers and powers associated to real routes.
Fractions Decimals and Percentages 		Pupils begin to recognise halves and quarters of numbers. They can identity basic equivalent fractions.	Pupils increase their understanding of fractions, percentages and decimals. They learn to add and subtract fractions with the same denominator.	Pupils progress to compare and order fractions with different denominators. They move freely between fractions, percentages and decimals.
Algebra 				Pupils develop confidence of working with algebraic expressions, equations and formulae. They will plot graphs for linear and quadratic equations.
Ratio, Proportion and Rates of Change 				Pupils learn to divide a given quantity into two parts as a given ratio, allowing them to relate language of ratio to the arithmetic of fractions.
Geometry – Position and Direction 	Pupils develop the ability to find objects in known and unknown places. They will understand over and under as well as forward and backwards.	Pupils learn what a rotation is. They learn language to describe position, direction and movement of objects.	Pupil's progress to use coordinates in the first quadrant of a grid. They will be able to describe the position of shape following a reflections or translation.	Pupils will learn to describe positions on a full coordinate grid in all 4 quadrants. They will be able to complete all transformations and enlarge shapes.
Geometry – Properties of Shape 	Pupils learn to use words, symbols or gestures to describe how objects are different and categorise them.	Pupils develop their understanding of 2d and 3d shapes to identify properties to categorise them.	Pupils can draw or model shapes and identify symmetry. They will develop the ability to measure and draw angles.	Pupils develop their knowledge of shapes including; irregular polygons, circles and compound shapes. They will calculate missing angles of shapes.
Measurement 	Pupils will understand and use the terms; heavy, light, more, less, first, last, enough and not enough to compare two object which are side by side.	Pupils develop their understanding to measure; capacity, volume, temperature, time, lengths and heights. This will allow them to sequence events and objects.	Pupils learn to convert between metric units of measurement and have a basic understanding of imperial equivalence. They can calculate perimeter area.	Pupils develop to convert between imperial and metric measurements. They will derive and apply formula to solve units of measure problems.
Statistics 		Pupils learn to interpret and construct; pictograms, tally charts and block diagrams.	Pupils develop to present data in a variety ways allowing them to solve problems involving comparison.	Pupils learn to construct and interpret pie charts. They use presented data to calculate averages and compare variables using scatter graphs.
Probability 				Pupils will record, describe and analyse the frequency of outcomes. They will calculate the theoretical probabilities of mutually exclusive and combined events.