



Maths Knowledge Organiser
Year 3

Autumn (14 weeks)	Spring (11 weeks)	Summer (13 weeks)
Number and Place Value - 2 weeks	Number – 1 week	Number – 1 week
Read and write numbers up to 1000 in numerals and words.	Use and write ordinal numbers to describe position – 1 st , 2 nd ...	Know number bonds for numbers to at least 20
Recognise the value of each digit in a three -digit number.	Identify, represent and estimate numbers up to 1000 objects.	Know pairs of numbers that make 100
Compare and order numbers to 1000 using $<$ $>$ $=$.	Find and write number sequences	Addition and Subtraction – 2 weeks
Find 10 or 100 more of a number.	Addition and Subtraction - 2 weeks	Solve addition and subtraction word problems using formal column method for addition and subtraction including missing number problems
Count from 0 in multiples in 4, 8, 50 and 100.	Solve addition and subtraction money problems using formal column method for addition and subtraction.	Multiplication and Division – 3 weeks
Addition and Subtraction - 2 weeks	Estimate an answer and use inverses to solve a problem. $(120 + \underline{\quad} = 200. \quad 125 - \underline{\quad} = 80)$	Know my 2x,3x, 4x, 5x , 8x, 10x tables.
Add and subtract numbers mentally including three-digit number and 1 and 10.	Add and subtract numbers mentally including 3-digit number and 1s,10s and 100s.	Solve problems relating to multiplication and division, choosing an appropriate method for myself.
Add and subtract numbers with up to three-digits using formal methods	Multiplication and Division - 2 weeks	Fractions – 3 weeks
Multiplication and Division - 3 weeks	Recall and use multiplication and division facts for x 8.	Find non -unit fractions of a set of objects ($\frac{2}{3}$ of 9, $\frac{3}{4}$ of 16)
Multiply a two- digit number by a one- digit number using formal column method - without exchange	Know how to mentally multiply and halve numbers to 100.	Find non unit fractions of a number
Recall and use multiplication and division facts for x3 and x4 table.	Multiply a two- digit number by a one- digit number using formal column method to include exchange.	Add and subtract fractions with the same denominator within one whole. $\frac{2}{5} + \frac{1}{5} = \frac{5}{7} - \frac{2}{7} =$
Divide a one digit and a two- digit number by a one- digit number without a remainder	Divide a one digit and a two- digit number by a one- digit number to include a remainder	Solve problems involving fractions.
Know that division is the inverse of multiplication.	Fractions - 2 weeks	Measurement – 2 weeks
Fractions - 3 weeks	Find unit fractions of a set of objects ($\frac{1}{4}$ of 12, $\frac{1}{3}$ of 9)	Work out time duration
Write a fraction using the term numerator and denominator.	Find unit fractions of a number ($\frac{1}{4}$ of 12, $\frac{1}{2}$ of 8)	Tell and write the time on a clock with Roman Numerals
Recognise and show equivalence of fractions	Order fractions on a number line including whole numbers and unit fractions.	Read timetables
Count up and down in tenths	Measure- 2 weeks	Solve word problems that require converting
Measure - 3 weeks	Add and subtract different lengths involving mm, cm and m and solve problems.	Convert between units of measurements for length, capacity and mass
Measure and compare lengths m, cm, mm.	Add and subtract mass and solve problems	Geometry – 1 week

(include practical measuring, solve word problems)					
Measure and compare mass kg and g. (include practical measuring, solve word problems)		Add and subtract capacity/volume and solve problems		Recognise angles in a shape and as a description of a turn.	
Measure and compare volume/capacity using ml and litres. (include practical measuring, solve word problems)		Solve (+, -, x and ÷) problems involving money.		Identify horizontal, vertical, parallel and perpendicular lines (link to 2D shapes)	
Tell and write the time to five minute on an analogue clock and a digital 12-hour clock		Tell and write the time to five minute on an analogue clock and a digital 24-hour clock		Understand compass directions and use grids to describe direction.	
Know the number of seconds in a minute, and the number of days in each month, year and leap year.		Geometry - 1 week		Sort shapes using Venn and Carroll diagrams.	
Geometry - 1 week		Make and recognise 3D shapes		Statistics – 1 week	
Name and draw 2D shapes		Identify right angles (recognise angles as a description of a turn)		Sort using Venn and Carroll diagrams	
Find the perimeter of simple 2D shapes.		Statistics - 1 week		Think of questions and answer them by sorting and organising data	
Statistics – included above		Collect and record data using a frequency table.		Solve one and two step problems using statistical information.	
Collect and record data on a pictogram		Make a bar chart			
AFL starters to include:					
- Compare and order numbers to 1000 using < > = - Recognise the value of each digit in a three -digit number. - Recognise and show equivalence of fractions - Tell and write the time to five minute on an analogue clock and a digital 12-hour clock - Name 2D shapes - Find the perimeter of simple 2D shapes. Arithmetic starters		- Find and write number sequences - Estimate an answer and use inverses to solve a problem. - Find unit fractions of a number - Compare lengths, mass and capacity - Recognise 3D shapes - Tell and write the time to five minute on an analogue clock and a digital 24-hour clock Arithmetic starters		- Know number bonds for numbers to at least 20 - Find non unit fractions of a number - Convert units of measurement - lengths, mass and capacity - Identify horizontal, vertical, parallel and perpendicular lines - Tell and write the time on a clock with Roman Numerals - Interpret diagrams and graphs Arithmetic starters	