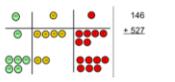
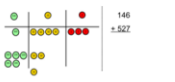
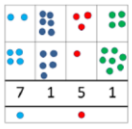
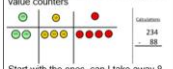
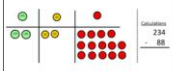
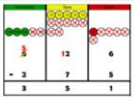
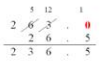
Year 5 Maths Long Term Planning

Week	Topic	Objectives	Vocabulary	Things to revisit
1-4	Number – Place Value	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Solve number problems and practical problems that involve all of the above Read Roman numerals to 1000 (M) and recognise years written in Roman numerals Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	place holder, place value, ones, tens, hundreds, thousands, ten thousands, hundred thousands, millions, negative number, integer, powers of ten, sequence, digit, number, equal, greater than, less than, inequality signs (< >)numeral, degree of accuracy, columns, round, estimate, calculation.	
5-7	Number – Addition and Subtraction	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Add and subtract numbers mentally with increasingly large numbers Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	add, subtract, addition, subtraction, calculation, total, column, exchange, operation, inverse, equals.	

Addition

	Concrete Year 2, Year 3 & Year 4	Pictorial Year 4 (4 Digit numbers)	Abstract Year 4, 5 and 6 – With decimals.
Column method- regrouping	Make both numbers on a place value grid.  Add up the units and exchange 10 ones for one 10.  Add up the rest of the columns, exchanging the 10 counters from one column for the next place value column until every column has been added. This can also be done with Base 10 to help children clearly see that 10 ones equal 1 ten and 10 tens equal 100. As children move on to decimals, money and decimal place value counters can be used to support learning.	Children can draw a pictoral representation of the columns and place value counters to further support their learning and understanding.  7 1 5 1	Clearly show the exchange below the addition. 536 + 85 = 621 As the children move on, introduce decimals with the same number of decimal places and different. Money can be used here. 72.8 + 54.6 = 127.4 

Subtraction

	Concrete Year 2, Year 3 & Year 4	Pictorial Year 2, Year 3 & Year 4	Abstract Year 4, 5 and 6 – With decimals.
Column method with regrouping	Use Base 10 to start with before moving on to place value counters. Start with one exchange before moving onto subtractions with 2 exchanges. Make the larger number with the place value counters  Start with the ones, can I take away 8 from 4 easily? I need to exchange one of my tens for ten ones.  Now I can subtract my ones. Now look at the tens, can I take away 8 tens easily? I need to exchange one hundred for ten tens.  Now I can take away eight tens and complete my subtraction  Show children how the concrete method links to the written method alongside your working. Cross out the numbers when exchanging and show where we write our new amount.	 Draw the counters onto a place value grid and show what you have taken away by crossing the counters out as well as clearly showing the exchanges you make.  When confident, children can find their own way to record the exchange/regrouping. Just writing the numbers as shown here shows that the child understands the method and knows when to exchange/regroup.	Children are to use the compact method.  This will lead to an understanding of subtracting any number including decimals. 

Year 5 Main Maths Long Term Planning

Week	Topic	Objectives	Vocabulary	Things to revisit
8	Measure – Units of measure	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	convert, place holder, tenths, hundredths, thousandths, ones, tens, hundreds, thousands, convert, unit, metric, digits.	
9-12	Number – Multiplication and Division	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19 Multiply and divide numbers mentally drawing upon known facts Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	multiply, divide, multiples, factors product, operation, division, formal method, inverse, equal, calculation, remainder, short division, digit, column, powers of 10, decimals, tenths, hundredths, thousandths, prime numbers, composite numbers, square(d), cube(d), common.	

Multiplication

			Year 5 & Year 6
Standard Written Method			This moves to the more compact method. 1342 x 18 13420 10736 24156

Division

	Concrete	Pictorial	Abstract Year 5
Short division			Begin with divisions that divide equally with no remainder. 218 4 872 Move onto divisions with a remainder. 86 r 2 5 432 Year 6 Finally move into decimal places to divide the total accurately. 14.6 35 511.0

13	Assessments			
14	Consolidation	See Things to revisit and QLA		