

Number Level 3		
<i>Counting and Number facts</i>	We are learning to	What we are looking for is
Skip counts forwards and backwards, from various starting points by 2s, 3s, 4s, 5s, 10s and 100s.	<ul style="list-style-type: none"> count by different numbers starting from any natural number. For example, 3,5,7,9 etc....(counting by 2's from any natural number) 	<ul style="list-style-type: none"> if you can correctly count by: 2s forwards and backwards from any natural number 3s forwards and backwards from any natural number 4s forwards and backwards from any natural number 5s forwards and backwards from any natural number 10s forwards and backwards from any natural number 100s forwards and backwards from any natural number
Knows number facts up to 30 using all four operations	<ul style="list-style-type: none"> about number facts. recall number facts using addition. recall number facts using subtraction. recall number facts using multiplication. 	<ul style="list-style-type: none"> if you can explain what number facts are. if you can use addition to recall number facts. if you can use subtraction to recall number facts. if you can use multiplication to recall number facts. if you can use division to recall number facts.

	<ul style="list-style-type: none"> recall number facts using division. 	
Automatic recalls of multiplication facts to 10X10	<ul style="list-style-type: none"> We are learning to recall number facts using timetables. 	<ul style="list-style-type: none"> if you know and can quickly recall timetables up to 10X10.
<i>Place Value</i>		
Use place value to read, record, interpret and order numbers beyond 1000.	<ul style="list-style-type: none"> expand ideas of place value of whole numbers up to, and beyond 1000. make models of numbers to 10,000. read, write and order numbers to 10,000. read decimals to hundredths (two decimal places) write decimals to hundredths (two decimal places) set out addition and subtraction vertically. 	<ul style="list-style-type: none"> use number expanders to explore numbers up to 1000 and beyond. show the correct amount of objects. can read the numbers. write the numbers correctly. order the numbers. that you can read decimals to two decimal places including situations involving money that you can write decimals to two decimal places including situations involving money. addition equations set out vertically and in the correct columns. subtractions equations set out vertically and in the correct columns
Rounds numbers off to nearest unit, ten, hundred, or thousand	<ul style="list-style-type: none"> round our numbers to the nearest unit. round our numbers to the nearest ten. round our numbers to the nearest hundred. round our numbers to the nearest thousand. 	<ul style="list-style-type: none"> numbers are rounded to the nearest unit. numbers are rounded to the nearest ten numbers are rounded to the nearest hundred. numbers are rounded to the nearest thousand.
<i>Operations</i>		

Estimates results of computations and decides if it is over or under estimation	<ul style="list-style-type: none"> estimate the addend before checking for the correct answer. 	<ul style="list-style-type: none"> An ability to make an estimation that is close to the actual answer An ability to identify whether the estimation is more or less than the actual answer.
Devise and use written methods of multiplication by single digits	<ul style="list-style-type: none"> recall number facts using multiplication. set out multiplication equations vertically. represent and solve multiplication multiply by single digit numbers. 	<ul style="list-style-type: none"> Use multiplication to recall number facts. Multiplication equations are set out vertically and in correct columns. Ability to correctly set out a multiplication problem as an algorithm in correct place value positions. Ability to solve multiplication problems involving multiplying by single digit numbers, using bridging where necessary.
Devise and use written methods for dividing numbers by a single digit divisor.	<ul style="list-style-type: none"> represent and solve division number problems using the correct algorithm. represent and solve division number problems that have remainders. 	<ul style="list-style-type: none"> Ability to correctly set out a division problem as an algorithm, with numbers in correct place value positions. Ability to solve division problems involving dividing by single digit numbers, using decomposition where necessary. Ability to solve division problems involving dividing by single digit numbers, using decomposition and remainders where necessary.
Addition involving numbers up to 999.	<ul style="list-style-type: none"> recall number facts using addition. set out addition equations vertically. represent and solve addition number problems 	<ul style="list-style-type: none"> Using addition to recall number facts. equations set out vertically, in correct columns. An ability to solve addition problems

	using the correct algorithm.	involving numbers up to 999, using bridging where necessary.
Subtraction using numbers up to 999.	<ul style="list-style-type: none"> recall number facts using subtraction. set out subtraction equations vertically. represent and solve subtraction number problems using the correct algorithm (without trading). represent and solve subtraction number problems using the correct algorithm (with trading). 	<ul style="list-style-type: none"> Students using subtraction to recall number facts. Subtraction equations are set out vertically and in correct columns. An ability to solve subtraction problems (i.e. the difference between 2 numbers) and if trading is involved, to record it.
<i>Fractions</i>		
Develops and understands fraction notation	<ul style="list-style-type: none"> use the correct terms when describing a fraction. what the terms mean. 	<ul style="list-style-type: none"> identify what the numerator/denominator and divisor are. explain the denominator is the bottom number within a fraction. The denominator shows how many parts a whole is broken into. explain the numerator is the top number of a fraction. The numerator tells how many parts of the whole there are, eg $\frac{3}{4}$- we are dealing with 3 of these parts. understand that the line is a symbol that separates the two numbers which means 'divided by'.
Compares simple common fractions	<ul style="list-style-type: none"> use materials to compare the size of fractions of a whole. use materials to compare the size of fractions 	<ul style="list-style-type: none"> students to state which of two fractions, is larger or smaller or equal to, using notation and physical models. students to state which of two fractions, is

	of a group.	larger or smaller or equal to, using notation and physical models
Adds and subtracts simple common fractions, using concrete materials	<ul style="list-style-type: none"> • use materials to add common fractions of a whole. • use materials to add common fractions of a group. • use materials to subtract common fractions of a whole. • use materials to subtract common fractions of a group. 	<ul style="list-style-type: none"> • students to show that they can use materials to add common fractions of a whole. • students to show that they can use materials to add common fractions of a group. • students to show that they can use materials to subtract common fractions of a whole. • students to show that they can use materials to subtract common fractions of a group.
<i>Decimals, percentages and ratios.</i>		
Orders decimals to hundredths	<ul style="list-style-type: none"> • write and compare numbers with up to two decimal places. 	<ul style="list-style-type: none"> • students to model and name tenths and to write decimal notations for tenths and hundredths.
Adds and subtract numbers to two decimal places, including situations involving money	<ul style="list-style-type: none"> • recognise and identify coins and notes. • select the appropriate operations and computation methods to solve money problems. 	<ul style="list-style-type: none"> • students to correctly identify the value of coins and notes. • students to select and apply the correct computations method to solve money problems.
<i>Structure</i>		
Investigates sequences of decimal numbers generated by using multiplication and division by 10	<ul style="list-style-type: none"> • see a pattern when multiplying with and dividing by 10, 100 & 1000. • use the multiplication and division process to find sequences of decimal numbers 	<ul style="list-style-type: none"> • Using concrete materials, eg money, we will know the value of a number. Eg 1c= 0.01, multiplied by 10 it equals 10c= 0.10. If multiplied by 10 again, it equals \$1.00

<p>Uses number properties and facts to assist with computations (e.g. all numbers that make 10 like 5+5 6+4,combinations for 7 like 3+4, 2+5)</p>	<ul style="list-style-type: none"> • use our understanding of numbers to solve computations 	<ul style="list-style-type: none"> • Different computations to equal the same number • automatic response • development of automatic recall of table facts • Skip counting forwards and backwards from various starting points • understanding of equivalence in fractions • understanding of factors, composite nos., multiples, prime nos. etc.
<p>Multiplies using the distributive property of multiplication over addition e.g. $13 \times 5 = (10+3) \times 5 = 10 \times 5 + 3 \times 5$</p>	<ul style="list-style-type: none"> • use the steps needed to multiply by one digit numbers 	<ul style="list-style-type: none"> • knowledge of place value <p>Distributive property eg $12 = 10 \text{ plus } 2$</p>
<p>Constructs number sentences with missing numbers and solves them.</p>	<ul style="list-style-type: none"> • make and solve equations with a missing number 	<ul style="list-style-type: none"> • knowledge of table facts • Problem solving skills • Knowledge of equals sign means is the same as • Understanding of inverse operations $4x ? = 12$ so 12 divided by 4 =3 • Understanding of associative law eg $2 \times 3 = 3 \times 2$
<p><i>Working Mathematically</i></p>		

Uses calculators to explore number patterns and check estimations.		
Apply known mathematical facts to solve problems.	<ul style="list-style-type: none"> • select the appropriate operations to solve problems. 	<ul style="list-style-type: none"> • students to select and apply the correct computations method to solve a problem.
Number games	<ul style="list-style-type: none"> • gain practice in applying mathematical ideas and processes. 	<ul style="list-style-type: none"> • Using new notions, processes and thinking strategies in solving mathematical problems.