LISTERDALE

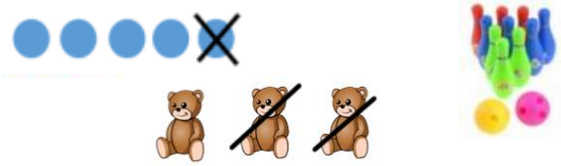
Progression in Calculations

Subtraction

Progression in subtraction

EYFS

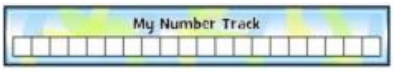
Subtract 1 digit numbers verbally using objects.
Counting back. Number bonds to 5.
Verbally follow a number sentence – say how many is left



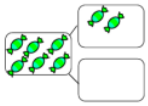
Year 1

Subtract one digit and 2 digit numbers to 20 including zero. Solve one step problems in subtraction using concrete objects and pictorial representations. Eg, 7 = ___ - 2
Identify one less. Find 'a difference' by counting up.

Counting back on a number line



Part whole models



Using objects and pictures

At first there were ___ apples.
Then ___ were eaten.
Now there are ___ apples.

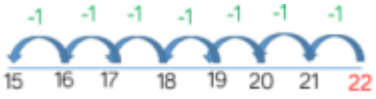
Finding the difference

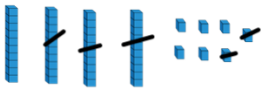
Year 2

Use concrete objects and pictorial representations before moving onto more formal recording using partitioning method. Addition and subtraction facts up to 20.
Subtraction of:
a 2-digit number and ones
a 2-digit number and tens
two 2 digit numbers
commutative and inverse relationships.
Solve subtraction problems, using concrete and pictorial representations.
Counting on to find the difference.

Use of dienes, numicon, place value counters and number lines to support learning before moving onto written methods.

22 – 7 =





47 - 32 =

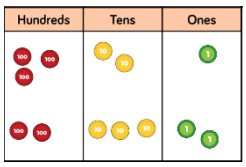
47 - 25 = 1. Biggest number first
47 - 5 = 42 2. Subtract the ones
42 - 20 = 22 3. Subtract the tens

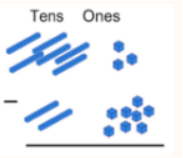
Year 3

Mental subtraction:
3 digit number and ones
3 digit number and tens
3 digit number and hundreds.

Using more formal written methods of subtraction, take away numbers with up to 3 digits. Estimate answer and use inverse to check.
Solve more complex problems including missing numbers.
Counting back and bridging through 10's and 100's

Using concrete/pictorial representations.



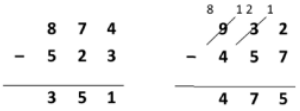


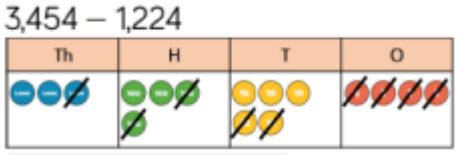
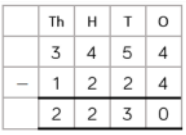
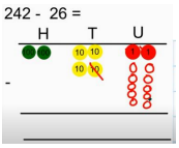
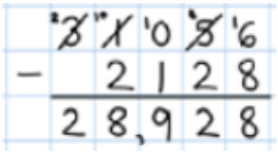
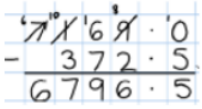
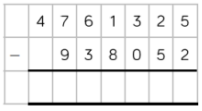
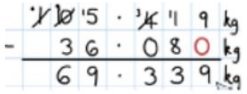
Expanded column subtraction (partitioning method, using friendly numbers first – no exchanging)

300 80 6
- 100 50 3

700 60 2
- 400 30 5

Compact column subtraction, without exchanging and then with exchanging (use apparatus to support exchanging)



Year 4 Use addition/subtraction facts to 100 and addition/subtraction facts of multiples to 100. Subtraction facts for 1 and 10 with decimal numbers to one decimal place. Subtract mentally combination of 2 and 3 digit numbers and decimals to one decimal place. Subtraction of numbers with up to 4 digits. using formal written method of column subtraction. Subtraction of decimals with at least one decimal place. Estimate and inverse to check calculations. Solve more complex two step problems deciding upon operation and method.	Use of concrete apparatus including dienes and place value counters.  Use of compact column method subtracting the ones first.  Exchanging – use apparatus (dienes and numicon to provide visual image), moving onto compact formal method.  Children use and apply this method to money and measures. £6. 78 - £2. 56 £
Year 5 Recall subtraction facts for 1 and 10 with decimal numbers to one decimal place. Subtraction number facts for 1 with decimal numbers to two decimal places. Subtract numbers mentally with increasingly large numbers and decimals to at least two decimal places. Subtract whole numbers with more than 4 digits and decimals with two decimal places. – using formal written method (column subtraction). Use rounding to check answers to calculations and level of accuracy. Solve subtraction multi step problems, deciding which operations and methods to use.	Formal method with more than 4 digits.  Extend to decimal numbers  Tenths, hundredths and thousandths should be correctly aligned, with the decimal point aligned vertically. Zero can be used as a place holder to indicate place value. Use compact column method to subtract in contexts of money, measures including decimals with a number of different decimal places.
Year 6 Recall subtraction facts for 1 with decimal numbers to two decimal places. Perform mental calculations, including with mixed operations and large numbers and decimals. Add and subtract whole numbers and decimals using formal written methods. Use estimation and inverse to check accuracy and determine the level of accuracy. Solve multi step problems deciding upon which operation to use.	Subtract numbers of increasing complexity including money measure and decimals with different numbers of decimal places.  

Use knowledge of the order of operations to carry out calculations involving the four operations.	Empty decimal places can be filled with zero.