

Year 3 Addition Strategies

National Curriculum

- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers

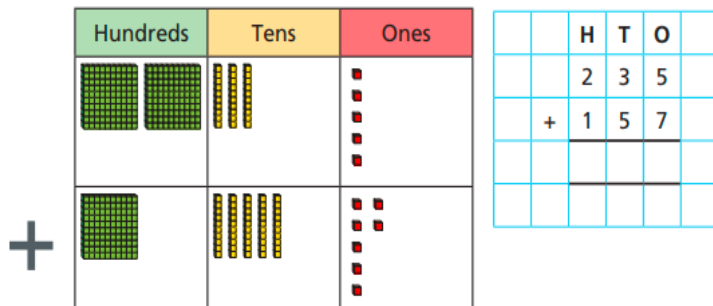
Children will need to know how to partition 3 digit numbers and the value of each digit.

Children will need to know how use Diennes apparatus and place value counters to add two numbers on a place value mat.

Progression in calculations:

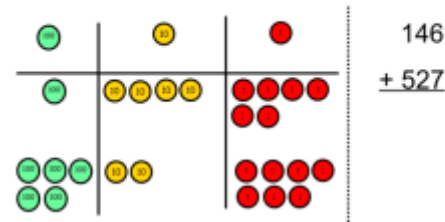
- a. No exchanging and regrouping needed
- b. Exchanging and regrouping only needed of ones to tens
- c. Exchanging and regrouping only needed of tens to hundreds
- d. Exchanging and regrouping only needed of hundreds to thousands
- e. Mixed exchanging in any column/more than one column

Concrete

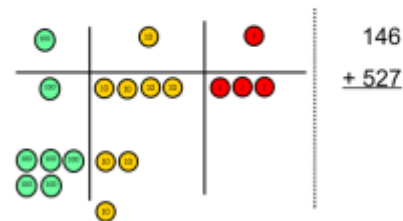


Pictorial

Make both numbers on a place value grid.



Add up the units and exchange 10 ones for one 10.



Abstract

	H	T	O
	3	7	2
+	1	4	4
	5	1	6
	1		

Year 3 Subtraction Strategies

National Curriculum

- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers

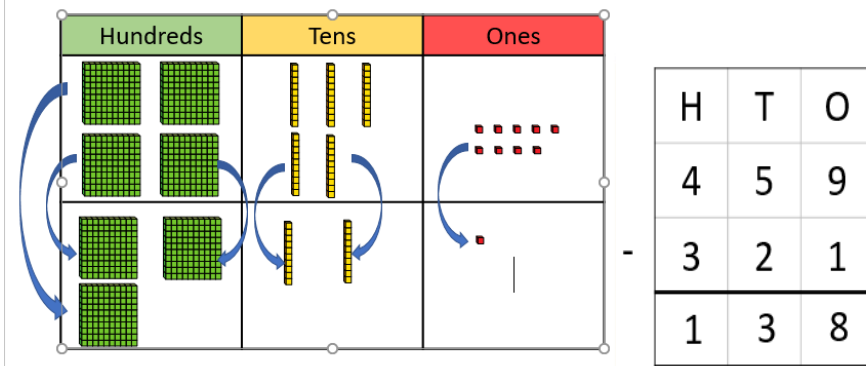
Children will need to know how to partition 3 digit numbers and the value of each digit.

Children will need to know how use Diennes apparatus and place value counters to subtract two numbers on a place value mat.

Progression in calculations:

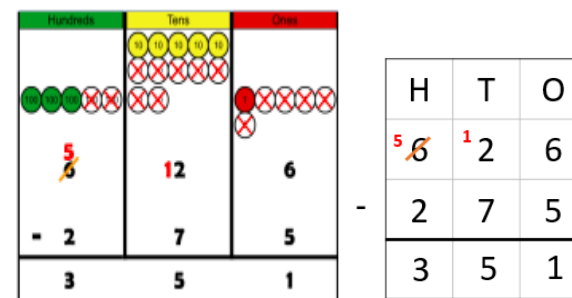
- a. No exchanging and regrouping needed
- b. Exchanging and regrouping only needed of a ten for 10 ones
- c. Exchanging and regrouping only needed of a hundred for 10 tens
- d. Exchanging and regrouping only needed of a thousand for 10 hundreds
- e. Mixed exchanging in any column/more than one column

Concrete



The number being subtracted from is made in the top row of the calculation mat. The number being subtracted is moved to a row underneath (the equipment is not taken off of the place value mat to enable the inverse operation to be more apparent).

Pictorial



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.

Abstract

	H	T	O
	4	5	9
-	3	2	1
	1	3	8

	H	T	O
	5 4	1 2	6
-	2	7	5
	3	5	1

