Addition and subtraction Y3

ESSENTIAL VOCABULARY

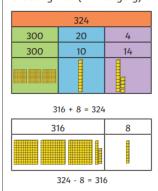|	
Add/plus/sum/altogether	The method of combining the total of two or more numbers.
Subtract/difference/less	The method of taking a value away from a number.
Total	The answer/finished sum.
Column addition	Formal method to solve addition questions.
Column subtraction	Formal method to solve subtraction questions.
Exchange	Regrouping means to exchange 10 of a particular place value column for 1 of the next place value column along.
Estimate	Round numbers to nearest 10, 100 or 1000 to suggest a reasonable answer.
Inverse operation	Addition and subtraction can be used as inverse operations to solve missing number questions.

Useful Diagrams

3 digit and 1 digit numbers

Not crossing 10s
$268 - 4 = 264$

Hundred	Ten	Ones

$343 + 6 = 349$

Crossing 10s (Exchanging)

324		
300	20	4
300	10	14

$316 + 8 = 324$

316	8

$324 - 8 = 316$

3-digit and 2-digit numbers

Add and subtract tens

Hundred	Ten	Ones

$451 + 3 \text{ tens} = 481 \ (5 + 3 = 8)$
$451 - 4 \text{ tens} = 411 \ (5 - 4 = 1)$

Crossing 10s (Exchanging)

$258 + 80 = 338$
- Column method
- Count in 10s mentally
- Add 100, subtract 20

Crossing 10 and 100

$$368 \quad 368 \quad 368$$
$$+73 \quad +73 \quad +73$$
$$\overline{1} \quad \overline{41} \quad \overline{441}$$

$$441 \quad 441 \quad 441$$
$$-73 \quad -73 \quad -73$$
$$\overline{8} \quad \overline{68} \quad \overline{368}$$

3-digit numbers

Not crossing
$679 - 351 = 328$

Hundred	Ten	Ones

Crossing 10s (Exchanging)

? → 154, 269

$$269$$
$$+154$$
$$\overline{423}$$

514	
268	?

$$514$$
$$- 268$$
$$\overline{246}$$

Add and Subtract 100s
$284 + 300 = 584$

Hundred	Ten	Ones

LINKS TO PREVIOUS LEARNING

- Solve problems with addition and subtraction using concrete objects and pictorial representations.
- Apply their knowledge of mental and written methods
- Recall and use addition and subtraction facts to 20 fluently and use related facts up to 100.
- Add and subtract numbers using concrete objects including, a 2-digit number and 1s, a 2-digit number and 10s and two 2-digit numbers as well as adding 3 one-digit numbers.
- Show that addition of 2 numbers can be done in any order and subtraction of 1 number from another cannot.
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Stem Sentences

I have _____. I have _____. Altogether I have_____
I have_____. I have subtracted _____. Altogether I have_____.

Key Themes

- Whole part model
- Rounding to estimate
- Column subtraction/addition
- Mental addition/subtraction
- Number bonds/complements
- Doubles/near doubles

Checking answers

347	
273	74

$347 - 74 = 273$ can be checked using
$273 + 74 = 347$
This part whole shows the inverse calculations using these three numbers.

423 → 154, 269

$154 + 269 = 423$	$269 + 154 = 423$
$423 - 154 = 269$	$423 - 269 = 154$

'As a family we live, love, learn and celebrate with Jesus.'