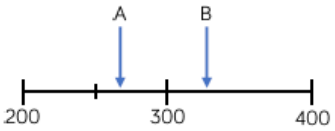


Focus: Addition and Subtraction

Time: 5 weeks

Crosby Primary School

Mathematics Medium Term Plan

Year 3 Autumn Term 2 Addition and Subtraction

R2P: 3NF-1, 3NF-3, 3AS-2, 3AS-3
Complements to 100
Use additive relationship (part-whole/commutative)
NC
Add and subtract numbers mentally, including a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds.
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 inverse operations to check answers.
Solve problems, including missing number problems, missing number facts, place value, and more complex addition and subtraction.

Concept Sequence

Apply number bonds within 10 – known facts. 3+2-5 so 30+20=50

Add Subtract 1s – from a 2/3 digit number. Use PV chart. No exchange.

Add Subtract 10s – from 2/3 digit numbers, no exchange. Use known facts.

Add Subtract 100s – known facts.

Spot patterns – add subtracts 1s 10s or 100s, no exchange

Add 1s across 10 – 2/3 digit numbers. Mental strategies using bonds.

Add 10s across 100 – tracks/part-whole/lines.

Subtract 1s across 10 – focus on mental strategies.

Subtract 10s across 100 – jump from/to previous multiples.

Make connections –consolidation, link to known facts.

Add and Subtract multiples of 100 – use concrete manipulatives and pictorial representation.

Add 2 numbers (no exchange) – introduce written methods. 2 or 3 digits.

Subtract 2 numbers – no exchange. 2 or 3 digits. Link written method to other representations.

Add 2 numbers across a 10. 2 or 3 digits - can affect tens and ones column. Only single digits can be held in a column – exchange. Note importance of zero as a placeholder.

Add 2 numbers across 100. 2 or 3 digits. Use representations along side.

Subtract 2 numbers crossing tens – use exchange. 2 or 3 digits. Need to be secure with regrouping before this step (eg. 321 = 3 hundreds, 2 tens and 1 one = 3 hundreds, 1 ten and 11 ones).

Subtract 2 numbers crossing hundreds - use base 10 alongside. Exchange.

Add 2 and 3 digit numbers – keep columns lined up.

Subtract 2 digit number from a 3 digit number. Keep columns lined up.

Complements to 100 – use bonds.

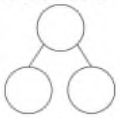
Estimate answers. Check reasonableness of answers. Discuss why estimation is important. Conside real life situations.

Inverse operations – checking answers. Missing numbers.

Make decisions. Add or Subtract - Word problems iuncluding multi-step.

Resources
Objects, Counters/cubes, base 10, arrow cards, number lines, Place Value Grid, Place Value counters
Gordons Maths Games, Mathletics, TTRockstars
BBC Super Movers
https://www.bbc.co.uk/teach/supermovers/ks2-collection/zr4ky9q

Complete each box for 400 + 500

Draw It	Write It	Part-Whole	Number Sentence
	___ hundreds and ___ hundreds is equal to ___ hundreds		___ + ___ = ___

Existing Vocabulary
Addition, Add, more, and, Make, sum, total
Altogether, double, near double
Half, halve
One more, two more…ten more..
One hundred more..
How many more to make..?
How many more is….than…?
How much more is…?
Subtract, takeaway
How many are left/left over?
How many have gone?
One less, two less, ten less….
One hundred less
How many fewer is…than…?
How much less is…?
Difference between
Equals, is the same as
Number bonds/pairs/facts
Missing number, Tens boundary

Times Tables 3NF-2

3x table – recall multiples, missing numbers, division, fractions

Count in 4s

New Vocabulary
Hundreds boundary
Exchange

Alex thinks the chart shows 456 – 4
Do you agree?

Hundreds	Tens	Ones

Explain why.

Planning Links
Maths No Problem/Aspire Maths
White Rose Scheme of Work:
https://assets.whiterosemaths.com/new-schemes/Y3%20Autumn%20Block%202%20SOL%20Addition%20and%20subtraction.pdf
NCETM Teacher Guide and Representations: https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/number-addition-and-subtraction/