Week Commencing: 13.04.2020

Year 3 Maths – Addition and Subtraction

Add & Subtract Multiples of 100

Notes and Guidance

Children are introduced to adding numbers greater than 100

They will apply their prior knowledge of adding and subtracting ones and tens to adding and subtracting multiples of 100

Using concrete manipulatives and pictorial representations throughout is important so the children can see the value of the digits.

Mathematical Talk

What is the same and what is different about 2 ones and 3 ones, 2 tens and 3 tens and 2 hundreds and 3 hundreds?

What is ___ hundreds and ___ hundreds equal to?

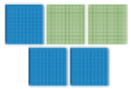
How many different ways can you represent 200 + 300?

Varied Fluency

Complete:

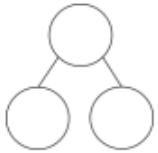
2 ones and 3 ones is equal to ___ ones.

2 tens and 3 tens is equal to ___ tens.

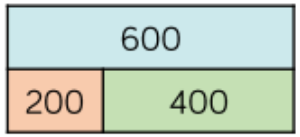


2 hundreds and 3 hundreds is equal to ___ hundreds.

Complete each box for 400 + 500

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

Use the bar model to complete the number sentences.



___ + ___ = 600
___ + ___ = 600
___ − ___ = 400
___ − ___ = 200

600 = ___ − ___
600 = ___ − ___
400 = ___ − ___
200 = ___ − ___

Reasoning and Problem Solving

_____ + _____ = 800

Each of the missing numbers are multiples of 100

Find all the possible missing numbers.

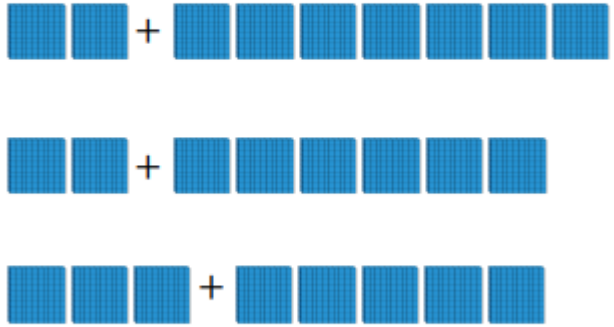
If I know 700 – 500 = 200, what else do I know?

Show me using concrete and pictorial representations.

Odd One Out

Which is the odd one out?

Explain why.



3-digit & 1-digit Numbers

Notes and Guidance

During this small step, children add and subtract ones from a 3-digit number without an exchange. They consider which digits are affected when adding ones. For example, if a child is completing 214 – 3 and 214 + 3 they see that they just need to focus on the ones column. Therefore, all they need to do is 4 + 3 and 4 – 3 respectively.
The use of the column method can be used but mental arithmetic is the best strategy.

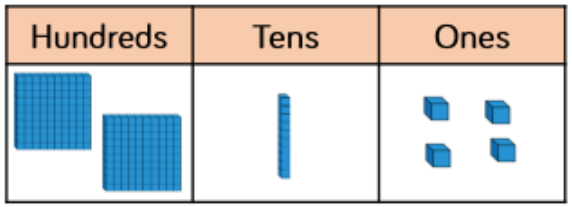
Mathematical Talk

Which column do I need to focus on?

What is the same about the subtractions? What changes each time? Write the number sentence that would come next in each list. Can you write the number sentence that would come before?

Can you use < and > to compare Jack and Tommy's team points?

Varied Fluency



Use the place value grid to complete the calculations.

214 – 3 = ___ 214 + 3 = ___

Complete:

356 – 5 =	356 – 5 =	356 – 5 =
357 – 5 =	356 – 4 =	366 – 5 =
358 – 5 =	356 – 3 =	376 – 5 =
359 – 5 =	356 – 2 =	386 – 5 =

Jack has 534 team points and gets four more.
Tommy has 534 team points and loses four of his.
How many team points does each person have?
Who has the most?

Reasoning and Problem Solving

Rosie has added or subtracted ones to get this answer.

Hundreds	Tens	Ones
● ● ●	● ● ● ●	● ●

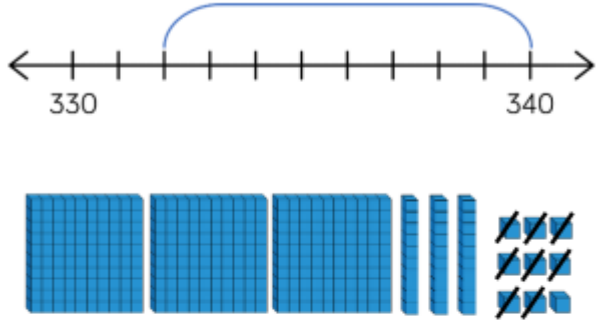
What could her calculation have been?

Her starting numbers are between and include 340 and 350

Did you use a strategy?

Do you see a pattern?

Which image does not represent 339 – 8?



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

Hundreds	Tens	Ones
● ● ● ●	● ● ● ● ●	● ● ● ● ● ●

Explain why.

Add 3-digit & 1-digit Numbers

Notes and Guidance

Children add ones to a 3-digit number, with an exchange. They discover that when adding ones it can affect the ones column and the tens column.

Children learn that we can only hold single digits in each column, anything over must be exchanged.

The use of 0 e.g. 145 – 5 is important so they know to use zero as a place holder.

Mathematical Talk

When you add ones to a number does it always, sometimes or never affect the tens column?

What is the largest digit you can have in each column? Why?

How does using the number line support partitioning the number? What number bonds help us with this method?

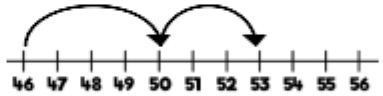
Varied Fluency

We can use Base 10 to solve 245 + 7

Use this method to calculate:

357 + 8 286 + 5 419 + 1

We can use a number line to calculate 346 + 7

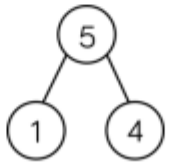


46 + 4 = 50 50 + 3 = 53
so 346 + 7 = 353

Use this method to calculate:

564 + 8 716 + 9 327 + 5

We can partition our 1-digit number to calculate 379 + 5



379 + 1 = 380 380 + 4 = 384

Use this method to calculate:

178 + 9 826 + 7 359 + 8

Reasoning and Problem Solving

Always, Sometimes, Never

When 7 and 5 are added together in the ones column, the digit in the ones column of the answer will always be 2

What other digits would always give a 2 in the ones column? Prove it.

Which questions are harder to calculate?

$234 + 3 =$

$506 + 8 =$

$455 + 7 =$

$521 + 6 =$

Explain your answer.