Knowledge Organiser

Year Group	Subject	Topic
2	Maths	Addition and Subtraction
The Big Picture		
Children will be working on addition and subtraction for 7 weeks. We have already completed 3 weeks of this topic in Autumn 1. We will be revisiting some of our learning from year 1 to make sure we are secure before moving on to the year 2 curriculum. Children will be working on commutative, inverse, key terminology to recognise whether we need to add or subtract in solving problems. We will also focus on regrouping of 2-digit numbers using various other methods and strategies to help us solve missing number problems.		
Enquiry Questions		
What is the same and different about number sentences?		
How do you know when to add or subtract in a word problem?		
How can I use related facts to solve worded problems?		
Why is addition commutative and subtraction isn't		
Why is addition commutative and subtraction isn't?		
Does it matter what order you add the numbers in?		
What do you notice about the positions of the numbers on the hundred squares?		
What would happen if you had more than ten ones?		
How do you know when to exchange/regroup?		
How many do you need to subtract to get to the previous 10?		
What do the symbols >, < and = mean?		
How do you work out a missing number?		

Key Vocabulary	Key Vocabulary
Add	Less
Total	Minus
Make	Take away
Plus	Mentally, Orally
Sum	Column Addition
More	Column Subtraction
Altogether	Estimate
Difference	Inverse operation
Leave	Solve problems
Subtract	Number facts
Difference between	Place_Value

Addition and Subtraction Bonds to 20

$15 + 5 = 20$
$20 - 5 = 15$
$20 - 15 = 5$

12	
7	5

$7 + 5 = 12$
$12 - 5 = 7$
$12 - 7 = 5$

$4 + 3 = 7$

$15 - 7 = 8$
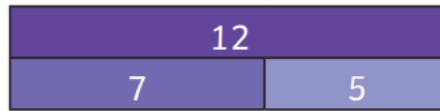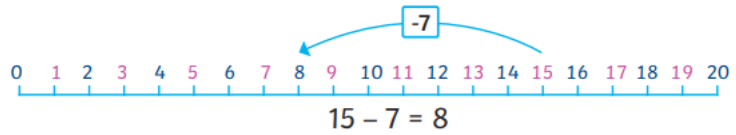
Methods

Add 2-digit and 1-digit

$27 + 6 = 33$

Tens	Ones

Subtract 1-digit from 2-digit

$33 - 6 = 27$

Tens	Ones

Add 2-digit numbers

$34 + 28 = 62$

3 tens and 4 ones

add

2 tens and 8 ones

equals

5 tens and 12 ones

becomes
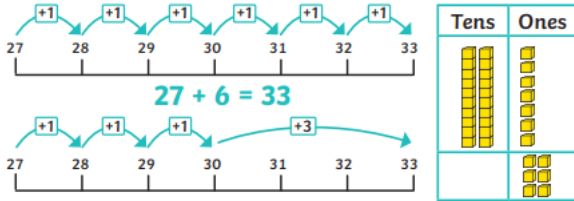
6 tens and 2 ones
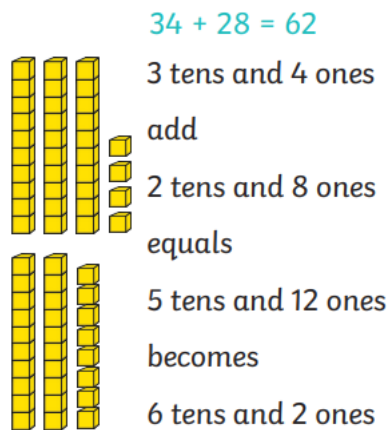
Subtract 2-digit numbers

$62 - 28 = 34$

6 tens and 2 ones becomes

5 tens and 12 ones subtract

2 tens and 8 ones equals

3 tens and 4 ones
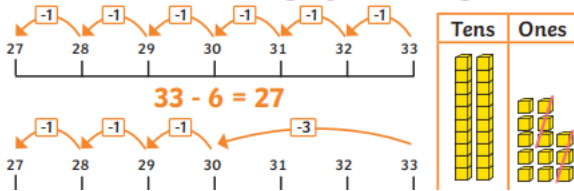
Mental Methods

Compare Number Sentences

$6 + 4 < 6 + 5$
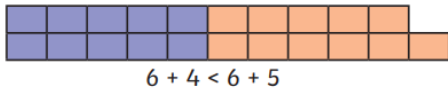
$5 + 3 = 6 + 2$

Related facts

$5 + 4 = 9$ so $50 + 40 = 90$
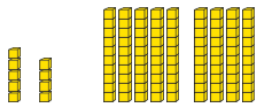
Add 3 1-digit numbers

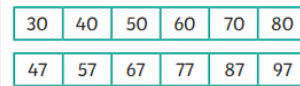$9 + 5 + 3 = 17$

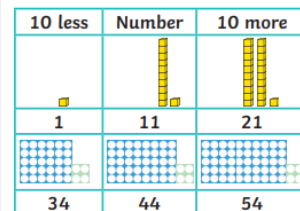# More or Less/ Add and Subtract 1s and 10s

Add and subtract 1s

$24 + 1 = 25$
$24 + 2 = 26$
$24 + 3 = 27$

24	25	26	27	28	29	30	31

$37 - 1 = 36$
$37 - 2 = 35$
$37 - 3 = 34$
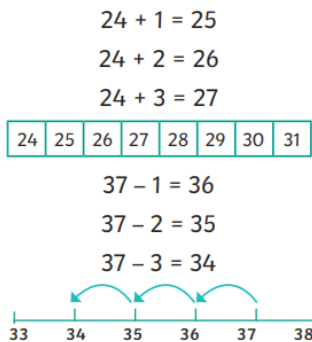
There are 7 flowers in a vase. One more is added. Now there are 8 flowers.

10 More or Less

30	40	50	60	70	80

47	57	67	77	87	97

The ones digit stays the same.

10 less	Number	10 more
1	11	21
34	44	54

Take care when crossing hundreds:

86	96	106	116

Add and Subtract 10s

10	30	50	70	90

3	33	63	93	

Tens	Ones	
		27
		+ 40
		67

Tens	Ones	
		72
		- 30
		42

Crossing hundreds:

74	94	114	134
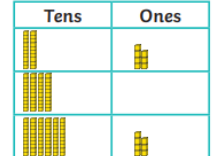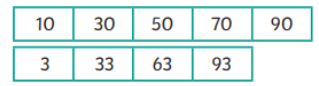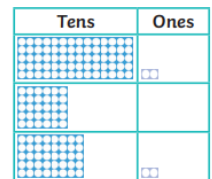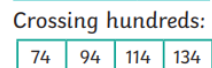
Check Calculations

19	
11	8
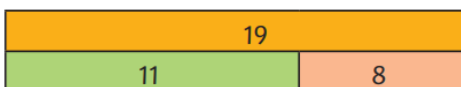
$19 - 8 = 11$ can be checked using $8 + 11 = 19$

$32 + 5 = 82$ x Spot that 5 tens have been added not 5 ones

$28 - 26 = 12$ x Spot that 28 and 26 are very close together, so difference won't be 12.

$37 - 4 = 41$ x Spot that if subtracting 4 the answer will be smaller.

$68 - 40 = 64$ x Spot that 4 ones have been subtracted and not 4 tens.