

# Addition and Subtraction

# Knowledge Organiser

## Key Vocabulary

## Addition and Subtraction Bonds to 20

Add

Total

Make

Plus

Sum

More

Altogether

Difference

Leave

Subtract

Difference between

Less

Minus

Take away

Mentally, Orally

Column Addition

Column Subtraction

Estimate

Inverse operation

Solve problems

Number facts

Place Value



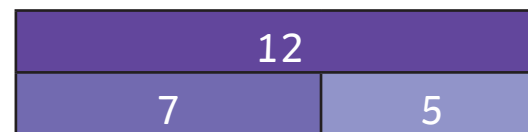
$15 + 5 = 20$

$20 - 5 = 15$

$20 - 15 = 5$



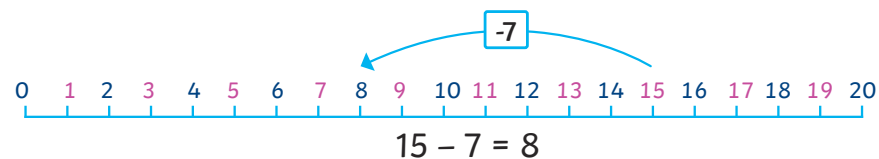
$4 + 3 = 7$



$7 + 5 = 12$

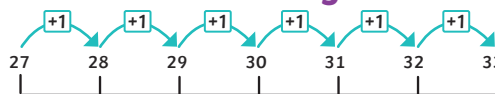
$12 - 5 = 7$

$12 - 7 = 5$

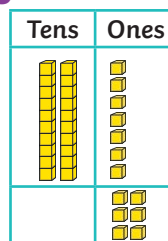
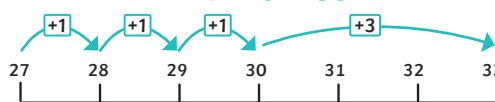


## Methods

### Add 2-digit and 1-digit

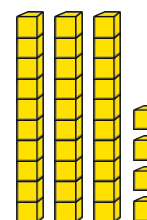


$27 + 6 = 33$



### Add 2-digit numbers

$34 + 28 = 62$

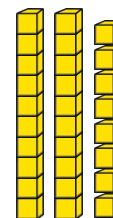


3 tens and 4 ones

add

2 tens and 8 ones

equals



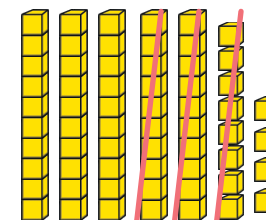
5 tens and 12 ones

becomes

6 tens and 2 ones

### Subtract 2-digit numbers

$62 - 28 = 34$



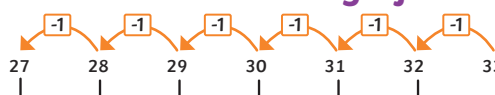
6 tens and 2 ones becomes

5 tens and 12 ones subtract

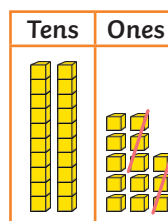
2 tens and 8 ones equals

3 tens and 4 ones

### Subtract 1-digit from 2-digit



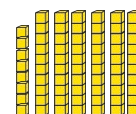
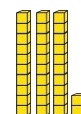
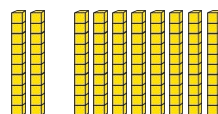
$33 - 6 = 27$



## Addition and Subtraction Bonds to 100

$2 + 8 = 10$

$so\ 20 + 80 = 100$



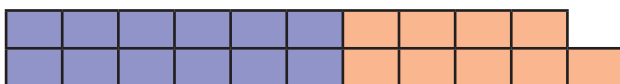
$32 + 68 = 100$

3 tens and 2 ones + 6 tens and 8 ones

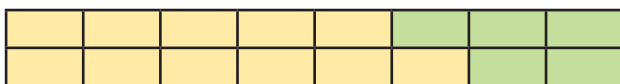
= 9 tens and 10 ones = 10 tens = one hundred

## Mental Methods

### Compare Number Sentences



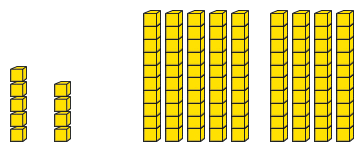
$$6 + 4 < 6 + 5$$



$$5 + 3 = 6 + 2$$

### Related facts

$$5 + 4 = 9 \text{ so } 50 + 40 = 90$$



### Add 3 1-digit numbers



$$9 + 5 + 3 = 17$$

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

### Add and subtract 1s

$$24 + 1 = 25$$

$$24 + 2 = 26$$

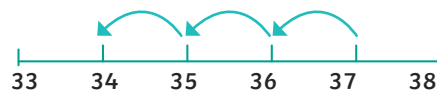
$$24 + 3 = 27$$



$$37 - 1 = 36$$

$$37 - 2 = 35$$

$$37 - 3 = 34$$



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



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

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

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

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

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