

YEAR 2

Subtraction

Vocabulary:

Subtraction, subtract, minus, whole, part, count back, left, missing part, equals, same as, number family, number sentence, calculation, number, numeral, digit (one-digit, two-digit), odd, even, pattern, tens, ones, jottings, inverse (see previous year groups)

Concrete

Pictorial

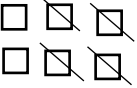
Abstract

Children need to be secure in number bonds to 10 and 20. See Year 1 subtraction policy.

Subtracting 2 digit numbers and multiples of 1 and 10

No exchanging (diennes)

$$56 - 4 = 52$$

Tens	Ones
	
50	2

Leading onto a 2-digit number subtracting tens (56 - 30)

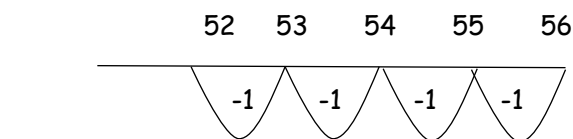
Subtracting 2 digit numbers and multiples of 1 and 10

No exchanging

Jottings

$$56 - 4 = 52$$

Number line



Leading onto a 2-digit number subtracting tens (56 - 30)

Subtracting 2 digit numbers and multiples of 1 and 10

Written

No exchanging

Subtracting ones

Tens	Ones
5	6
	4
5	2

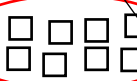
Subtracting tens

Tens	Ones
5	6
3	0
2	6

This written method is only shown alongside the pictorial representation.

Exchanging (diennes)

$$56 - 7 = 49$$

Tens	Ones
	
	

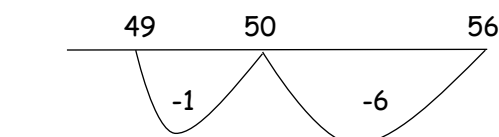
One ten = ten ones

Exchanging (diennes)

Jottings

$$56 - 7 = 49$$

Number line



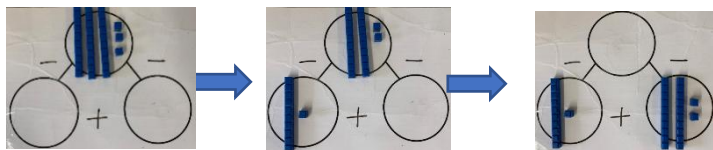
Start with counting back in ones then to the ten.

No written method for exchanging.

Subtract two 2-digit numbers:

No exchanging (diennes)

$$33 - 11 = 22$$



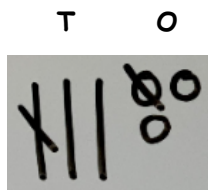
Tens	Ones

Subtract two 2-digit numbers:

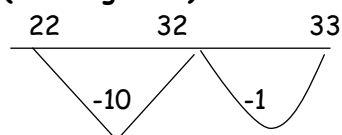
No exchanging

Jottings

$$33 - 11 = 22$$



Number line (counting back)



Subtract two 2-digit numbers:

No exchanging

Tens	Ones
3	3
1	1
2	2

This written method is only shown alongside the pictorial representation.

Subtract two 2-digit numbers:

Exchanging

$$33 - 14 = 19$$



Exchange 1 ten for 10 ones.

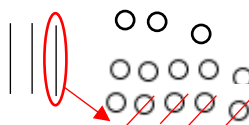
Tens	Ones

Subtract two 2-digit numbers:

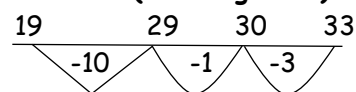
Exchanging

$$33 - 14 = 19$$

Jottings

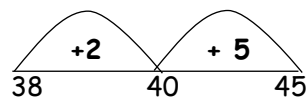


Number line (Counting back)



Number line (Counting on - finding the difference)

$$45 - 38 = 7$$



Subtract two 2-digit numbers:

No written method for exchanging.

Mental Methods

Number/fact families:

Using knowledge of inverse:

If $23 + 31 = 54$

Then $54 - 23 = 31$

Counting on/up:

(for small differences between numbers)

$$34 - 28 = 6$$

$$28 + 2 = 30$$

$$30 + 4 = 34$$

$$2 + 4 = 6$$

Counting back:

$$56 - 17 = 39$$

$$56 - 10 = 46$$

$$46 - 6 = 40$$

$$40 - 1 = 39$$

Equivalent differences:

$56 - 39$ is the same as $57 - 40 = 17$

Partitioning:

$$45 - 23$$

$$40 - 20 = 20; 5 - 3 = 2; 20 + 2 = 22$$

Adjusting:

$36 - 9 + 1$ to both sides to give:

$$37 - 10 = 27$$

$45 - 19 + 1$ to both sides to give:

$$46 - 20 = 26$$

Using known facts and place value:

$$68 - 5$$

If $8 - 5 = 3$ then $68 - 5 = 63$

$$70 - 30$$

If $7 - 3 = 4$ then $70 - 30 = 40$

Inverse/missing number:

$$41 + \underline{\quad} = 56$$

$$\underline{\quad} + 13 = 47$$