

YEAR 4

Subtraction

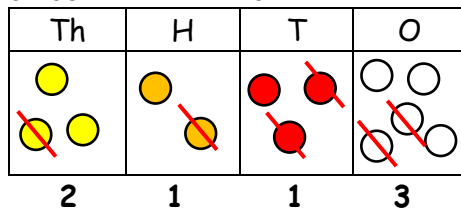
Vocabulary: difference, minus, subtract, take way, less than; subtrahend - minuend = difference (see previous year groups)

Concrete

Subtract whole numbers with up to 4d.

No exchanging:

$$3\ 235 - 1\ 122 = 2\ 113$$



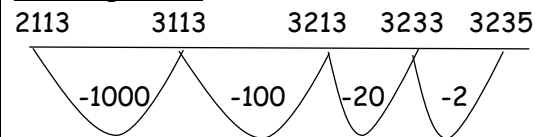
See year 3 policy for subtracting multiples of 1000, 100, 10 and 1s.

Pictorial

Subtract whole numbers with up to 4d.

No exchanging:

Counting back:



Counting on:

Where the numbers in the calculation allow for easy adding of the resulting jumps.

Abstract

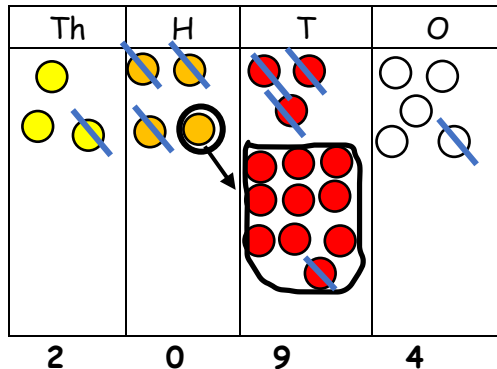
Written

No exchanging:

$$\begin{array}{r} 3\ 235 \\ -1\ 122 \\ \hline 2\ 113 \end{array}$$

Exchanging:

$$3\ 435 - 1\ 341 = 2\ 094$$

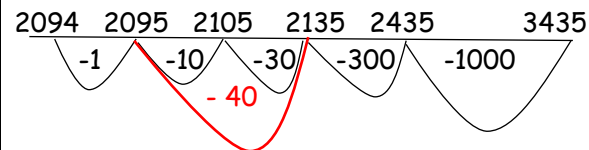


Exchange at different and several points e.g:
4 167 - 1342; 5462 - 2158; 5236 - 2572

Exchanging:

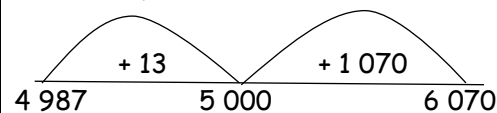
Counting back:

$$3\ 435 - 1\ 341 = 2\ 094$$



Counting on:

$$6\ 070 - 4\ 987 = 1\ 083$$



Exchanging:

$$3\ 435 - 1\ 341 = 2\ 094$$

Expanded




$$\begin{array}{r} 3000\ 400\ 130\ 5 \\ -1000\ 300\ 40\ 1 \\ \hline 2000\ 0\ 90\ 4 \end{array}$$

Compacted

$$\begin{array}{r} 3\ 435 \\ -1\ 341 \\ \hline 2\ 094 \end{array}$$

Subtracting decimals up to 2 decimal places (as money or measures):

$$£5.45 - £2.23 = £3.22$$

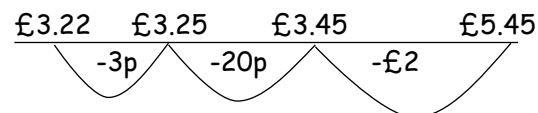
O	th	hth
		
3	2	2

Use place value counters or money depending on the context.

Start with no exchanging leading to exchanging.

Subtracting decimals up to 2 decimal places (as money or measures):

Counting back:



Counting on:

Where the numbers in the calculation allow for easy adding of the resulting jumps.

Subtracting decimals up to 2 decimal places (as money or measures):

No exchanging:

$$\begin{array}{r} £ 5.45 \\ -£ 2.23 \\ \hline £ 3.22 \end{array}$$

When exchanging use expanded method first leading on to compacted method.

Mental Methods

Counting on/up (finding the difference)

$$3267 - 2980 = 287$$

$$2980 + 20 = 3000, 3000 + 267$$

$$\text{Then } 20 + 267 = 287$$

Counting back:

$$4548 - 234$$

(partition 234 then -200, -30, -4)

Using known facts and place value:

$$9000 - 3000$$

$$9 - 3 = 6; 90 - 30 = 60; 900 - 300 = 600 \text{ so } 9000 - 3000 = 6000$$

Partitioning:

No exchanging - $4\ 345 - 1\ 223$

Subtracting a power of 10:

$$3\ 453 - 1\ 000$$

$$5\ 321 - 100$$

(Children recognise which column will change)

Adjusting:

$$2\ 456 - 29 (+ 1 \text{ to both numbers}) 2457 - 30 = 2\ 427$$

$$2\ 456 - 399 (+ 1 \text{ to both numbers}) 2457 - 400 = 2057$$

$$2\ 456 - 1999 (+ 1 \text{ to both numbers}) 2\ 456 - 2000 = 456$$