

Calculation Policy - Subtraction



EYFS

Understanding the operation and related vocabulary

- understand subtraction as:
 - taking away
 - comparison (finding the difference)
- record using marks that they can interpret and explain
- begin to use the vocabulary involved in subtracting

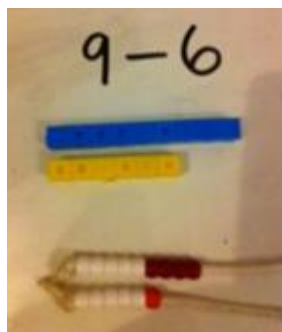
take away, subtract, how many are left, how many more to make, how many more, how many fewer, ...less than .., leave, how many have gone

Recall number facts

- recall number facts up to 5 and the same facts to 10.

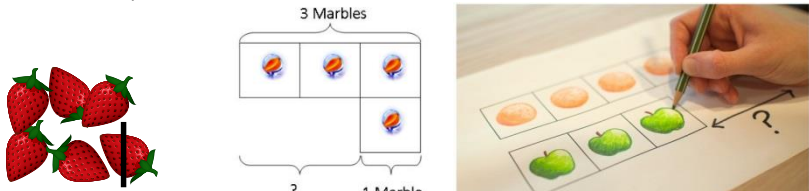
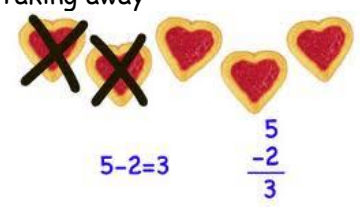
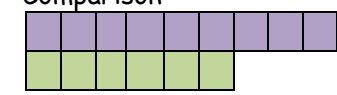
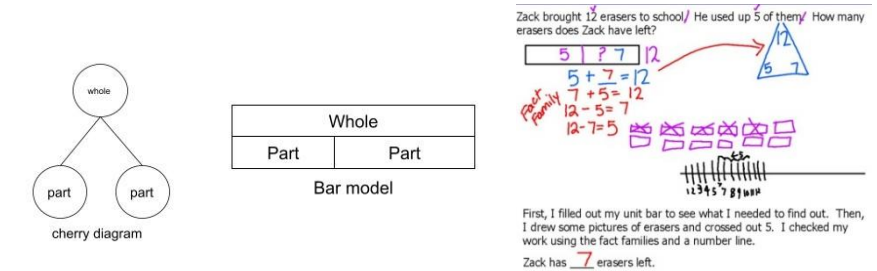
Mental methods

- find how many are left when some are taken away
- subtract two single-digit numbers and count back to find the answer.
- partition a given number of objects (up to 10) into 2 groups



Calculation Policy - Subtraction

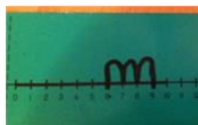
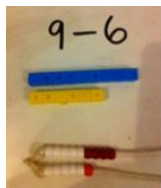
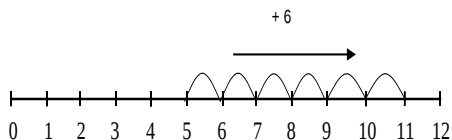


Year 1	Year 2
Understanding the operation and related vocabulary	
- Understand subtraction as: - Taking away - Comparison  - Read, write and interpret mathematical statements involving subtraction (-) and equals (=) sign. - Solve missing number problems - Understand the vocabulary related to subtraction; <i>Minus, the difference between, how much more is... than..., how much less is... than...</i>	- Understand subtraction as: - Taking away  - Comparison  - Show that subtraction of one number from another cannot be done in any order. - Recognise the inverse relationship between addition and subtraction  - Solve missing number problems - Understand the vocabulary related to subtraction
Recalling number facts	
- Recall and use subtraction facts to 10 fluently 6 minus 3 8 subtract 2 4 less than 9 - Know pairs with a total of 20 and derive related subtraction facts 20+0 20-1 20-2 20-3	- Recall and use subtraction facts to 20 fluently, and derive and use related facts up to 100 15 subtract 8 4 less than 12 80 minus 30 90 take 50 - Know compliments to the next multiple of 10 52 + <u> </u> = 60 52 + <u> </u> = 80

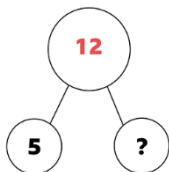
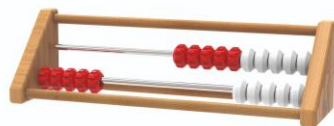
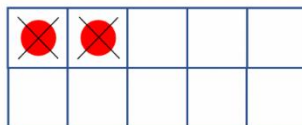
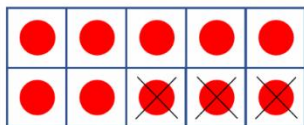
Calculation Policy - Subtraction

Mental methods and mental methods with jottings

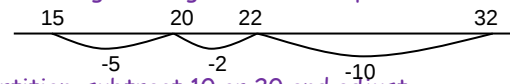
- Subtract one digit and two digit numbers to 20 including zero
- Represent and use number bonds within 20
- Partition a given number of objects (up to 20) into 2 groups
 - Use knowledge of pairs making 10.
 - Partition: Count on or back in tens and ones to find the difference.



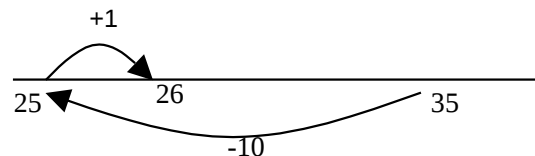
- Count on or back in 1s, 2s or 10s.
- Partition: Bridge through ten on a tens frame using a part whole model.



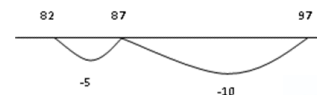
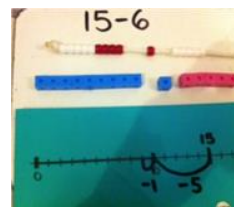
- Subtract numbers using concrete objects, pictorial representations, and mentally, including
 - A two digit-number and ones
 - A two digit-number and tens
 - Two two-digit numbers
 - Count on or back in tens to find the difference.
 - Partition: bridge through 10 and multiples of 10 when subtracting.



- Partition, subtract 10 or 20 and adjust.



- Partition: bridge through 10 and multiples of ten when subtracting.



Formal written layout

No formal written layout

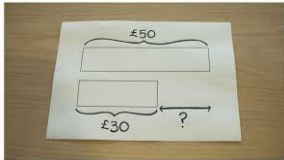
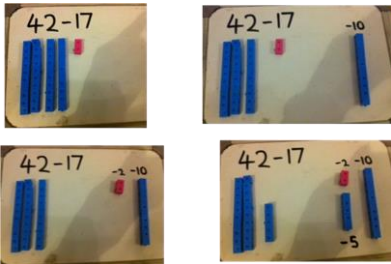
Children will be recording their mathematics using pictorial representations, number lines and mathematical statements e.g. $12-4 =$

Estimating and checking

Check calculations by subtracting in a different way.

Calculation Policy - Subtraction



Year 3	Year 4
Understanding the operation and related vocabulary	
- Continue to develop understanding of subtraction  - Understand that the principles of the commutative and associative laws do not apply to subtraction - Understand the inverse relationship between addition and subtraction - Solve missing number problems - Understand, read and spell vocabulary related to subtraction correctly	- Continue to understand that the principles of the commutative and associative laws do not apply to subtraction - Continue to understand the inverse relationship between addition and subtraction - Continue to solve missing number problems - Understand, read and spell vocabulary related to subtraction correctly
Recalling number facts	
- Continue to recall and use subtraction facts to 20 fluently, and derive and use related facts beyond 100 - Know pairs of two digit numbers with a total of 100 and derive related subtraction facts	- Continue to use knowledge of subtraction facts and place value to derive related facts - Know compliments to the next multiple of 100
Mental methods and mental methods with jottings	
- Subtract 3 digit number and 1s - Subtract 3 digit number and 10s - Subtract 3 digit number and 100s - Count back in hundreds, tens and ones. - Use knowledge of place value and related calculations. 	- Continue to practise mental methods of subtraction with increasingly large numbers - Count back in minutes and hours, bridging through 60. - Partition, subtract 10s and then 1s.  - Subtract by count up from the smaller to the larger number. Find a difference between two numbers by counting up from the smaller to the larger, e.g. 506 – 387  - Subtract a multiple of 10 and adjust.

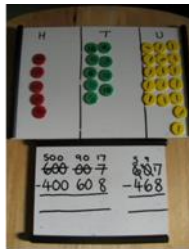
This Calculation Policy summaries some of the Statutory Requirements for the 2014 Maths National Curriculum with the written methods to be taught for each year group within Wetherley Primary School. Planning should be done from the NC2014 and an easy to view Four Operation Flyer is available for each year group to be shared with parents and children annually.

Calculation Policy - Subtraction

Formal written layout

Subtract numbers with up to 3 digits, using formal written methods of columnar subtraction.

$$\begin{array}{r} 24 \\ - 15 \\ \hline 9 \end{array}$$



Use visuals when appropriate

- Subtract numbers with up to 4 digits, using formal written methods of column subtraction.
- Subtract decimals up to decimal places (in the context of money or measures)

Begin to use compact column subtraction

$$\begin{array}{r} 6 \text{ } 11 \text{ } 16 \\ \cancel{7} \text{ } \cancel{2} \text{ } \cancel{8} \\ - 3 \text{ } 5 \text{ } 8 \\ \hline 3 \text{ } 6 \text{ } 8 \end{array}$$

Estimating and checking

Estimate the answer to a calculation

Use inverse operations to check answers

Use equivalent calculations to check answers

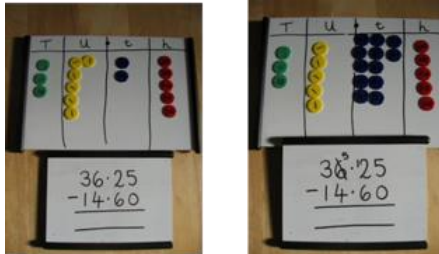
Calculation Policy - Subtraction



Year 5	Year 6
Understanding the operation and related vocabulary	
- Continue to solve missing number problems - Begin to use brackets - Read, spell and pronounce vocabulary related to subtraction correctly	- Use their knowledge of the order of operations - Continue to solve missing number problems - Explore the order of operations using brackets - Read, spell and pronounce vocabulary related to subtraction correctly
Recalling number facts	
- Continue to use knowledge of subtraction facts and place value to derive related facts with numbers to one decimal place - Know complements to 1 - Recall pairs of three digit numbers with a total of 1000 and derive related subtraction facts	- Continue to use knowledge of subtraction facts and place value to derive related facts with numbers to two decimal places - Know complements to the next whole number
Mental methods and mental methods with jottings	
- Subtract increasingly large number ($12,462 - 2300 = 10,162$) - Subtract tenths, and one digit whole numbers and tenths - Count on or back in hundreds, tens, ones and tenths, - Subtract by counting up from the smaller to the larger number. Find a difference between two numbers by counting up from the smaller to the larger, e.g. $2009 - 869$ Find change using shopkeepers' addition, e.g. buy toy for £6.89 using £10 - Subtract a multiple of 10 or 100 and adjust. - Use knowledge of place value and related calculations, eg $6.3 - 4.8$ using $63 - 48$. - Count back in minutes and hours, bridging through 60.	- Perform mental calculations, including with mixed operations, large numbers and decimals - Calculate intervals across zero - Count on or back in hundreds, tens, ones, tenths and hundredths. Find a difference between two decimal numbers by counting up from the smaller to the larger, e.g. $1.2 - 0.87$ Using number facts Derived facts from number bonds to 10 and 100, e.g. $0.1 - 0.075$ using $75 + 25 = 100$ or $5 - 0.65$ using $65 + 35 = 100$ - Use knowledge of place value and related calculations, eg $630 - 480$, $6.3 - 4.8$; $0.63 - 0.48$ - Subtract a whole number and adjust, eg $6.5 - 3.8 = 6.5 - 4 + 0.2$. - Count back in minutes and hours, bridging through 60 (analogue, digital and 24 hour clock)

This Calculation Policy summaries some of the Statutory Requirements for the 2014 Maths National Curriculum with the written methods to be taught for each year group within Wetherley Primary School. Planning should be done from the NC2014 and an easy to view Four Operation Flyer is available for each year group to be shared with parents and children annually.

Calculation Policy - Subtraction

Formal written layout	
- subtract whole numbers with more than 4 digits using formal written method - Subtract decimals, including a mix of whole numbers and decimals with different numbers of decimal places Decomposition $ \begin{array}{r} \begin{array}{c} 8 \quad 12 \quad 1 \\ 9 \quad 3 \quad 2 \\ - 4 \quad 5 \quad 7 \\ \hline 4 \quad 7 \quad 5 \end{array} \\ \text{Answer: 475} \end{array} $	- Practise subtraction for larger numbers, using formal written methods - Continue to practise subtraction calculations with decimals (up to 3 decimal places)  Decomposition $ \begin{array}{r} \begin{array}{c} 2 \quad 14 \quad 7 \quad 15 \\ \cancel{2} \quad \cancel{14} \quad \cancel{7} \quad \cancel{15} \\ - 1 \quad 6 \quad 4 \quad 5 \quad 8 \\ \hline 1 \quad 8 \quad 2 \quad 2 \quad 7 \end{array} \end{array} $
Estimating and checking	
Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Continue to use appropriate strategies to check answers	