

**Written Calculation Policy
for Shipham Church of
England First School**

(Aligned with the 2014
National Curriculum)



April 2015

Progression towards a standard written method of calculation

Introduction

This calculation policy has been written in line with the programmes of study taken from the revised National Curriculum for Mathematics (2014). It provides guidance on appropriate calculation methods and progression. The content is set out in yearly blocks under the headings: addition, subtraction, multiplication and division. Statements taken directly from the programmes of study are listed in bold at the beginning of each section.

Children will use mental methods as their first port of call when appropriate, but for calculations that they cannot do in their heads, they will need to use an efficient written method accurately and with confidence.

Aims of the policy

- To ensure consistency and progression in our approach to calculation.
- To ensure that children develop an efficient, reliable, formal written method of calculation for all operations.
- To ensure that children can use these methods accurately with confidence and understanding.

How to use this policy

Use this policy as a basis for planning but ensure you use previous or following years' guidance to allow for personalised learning.

Always use Assessment for Learning to identify suitable next steps in calculation for groups of children.

If, at any time, children are making significant errors, return to the previous stage in calculation.

Always use suitable resources, models and images to support children's understanding of calculation and place value, as appropriate.

Encourage children to make sensible choices about the methods they use when solving problems.

Stages in Addition

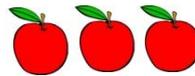
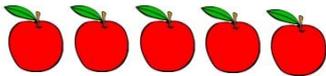


Addition – Early Stages (EYFS)

Children will engage in a wide variety of songs and rhymes, games and activities. They will begin to relate addition to **combining two groups of objects**, first by **counting all** and then by **counting on** from the largest number.

They will find one more than a number.

In practical activities and through discussion they will begin to use the vocabulary involved in addition.



“You have five apples and I have three apples. How many apples altogether?”

Addition – Year One

- **Given a number identify one more**
- **Read, write and interpret mathematical statements involving addition (+) and the equals (=) sign**
- **Add one-digit and two-digit numbers within twenty, including zero**
- **Solve missing number problems eg $10 + \square = 16$**

NB Ensure that children are confident with the methods outlined in the previous year’s guidance before moving on.

Children will continue to practice counting on from any number eg “Put five in your head and count on four.”

Initially use a **number track** to count on addition, counting on from the largest number.

1	2	3	4	5	6	7	8	9	10
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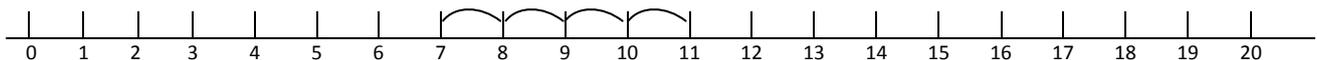
$$5 + 4 = 9$$

“Put your finger on number five. Count on (count forward) four.”

Then progress to a **marked number line**.

$$4 + 7 = 11$$

“Start with the larger number. Put your finger on number 7 and count on 4”



Ensure children are confident using a marked number line before moving on to an empty number line (see Year Two guidance).

Continue to practise counting on from the largest number for addition with totals within twenty.



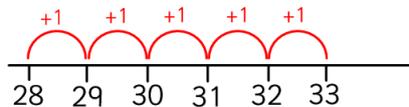
Addition – Year Two

- Add 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
 - Three one-digit numbers

NB Ensure that children are confident with the methods outlined in the previous year's guidance before moving on.

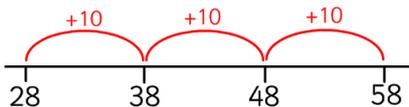
Counting on in ones using an **empty number line**, within 100.

$$28 + 5 = 33$$



Counting on in tens using an **empty number line**, within 100.

$$28 + 30 = 58$$

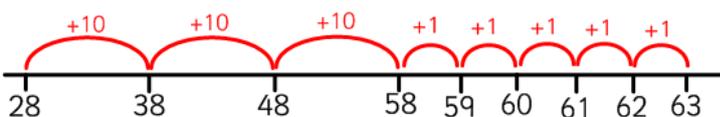


Use in conjunction with a **100 square** to show the jumps of ten.

Partitioning into tens and units.

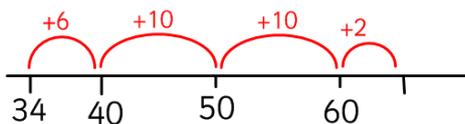
$$28 + 35 = 63$$

“Put the biggest number first then partition the smaller number into tens and units. Count on the tens first then the units. ($28 + 30 + 5$)”



When confident move on to more efficient jumps. Partition units number to round to the next ten, then count on tens and remaining units.

$$34 + 28 = 62$$





Also use the **partitioning method** to add two two-digit numbers.

$$\begin{array}{r}
 54 + 25 = 79 \\
 \swarrow \quad \searrow \quad \swarrow \quad \searrow \\
 50 \quad 4 \quad 20 \quad 5 \\
 50 + 20 = 70 \\
 4 + 5 = 9 \\
 70 + 9 = 79
 \end{array}$$

“Partition the numbers into tens and ones/units.
Add the tens together.
Add the ones/units together
Recombine to give the answer”

Move on to calculations that **bridge** the tens.

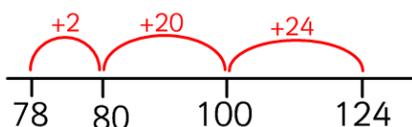
$$\begin{array}{l}
 54 + 28 = 50 + 4 + 20 + 8 \\
 50 + 20 = 70 \\
 4 + 8 = 12 \\
 70 + 12 = 82
 \end{array}$$

Addition – Year Three

- **Add numbers with up to three digits, using formal written method of columnar addition.**

NB Ensure that children are confident with the methods outlined in the previous year’s guidance before moving on.

Further develop the use of the **empty number line** with calculations that **bridge 100**.



Move on to the addition of a three-digit and a two-digit number.

Introduce the **expanded written method** with the calculation presented both horizontally and vertically (in columns).

Initially use calculations where it is not necessary to bridge across the tens or hundreds.

$$43 + 32 = 75$$

$$\begin{array}{r}
 40 \quad 3 \\
 +30 \quad 2 \\
 \hline
 70 \quad 5 = 75
 \end{array}$$

“Partition the numbers into tens and ones/units. Add the units and then add the tens. Recombine to give the answer.”

Then...

$$\begin{array}{r}
 43 \\
 +32 \\
 \hline
 5 \quad (3 + 2) \\
 +70 \quad (40 + 30) \\
 \hline
 75
 \end{array}$$

Add the units together first and then the tens in preparation for the formal written method.

This will lead into the **formal written method**.



$$\begin{array}{r} 43 \\ + 32 \\ \hline 75 \end{array}$$

Use the language of place value to ensure understanding:
"Three add two equals five. Write five in the units column. 40 add 30 equals 70. Write 7 (70) in the tens column."

NB Informal/mental methods would be more appropriate for numbers of this size, but use two-digit numbers when introducing the columnar method.

Then introduce calculations where it is necessary to bridge, returning to an **expanded method** initially.

$$48 + 37 = 85$$

$$\begin{array}{r} 40 \quad 8 \\ + 30 \quad 7 \\ \hline 70 \quad 15 \end{array} = 85$$

"Partition the numbers into tens and ones/units. Add the units and then add the tens. Recombine to give the answer."

Then...

$$\begin{array}{r} 48 \\ + 37 \\ 15 \quad (8 + 7) \\ + 70 \quad (40 + 30) \\ \hline 85 \end{array}$$

Add the units together first and then the tens in preparation for the formal written method.

If children are ready, introduce the formal written method, where it is necessary to 'carry' ten from the units to the tens column.

$$\begin{array}{r} 48 \\ + 37 \\ \hline 1 \\ \hline 85 \end{array}$$

Use the language of place value to ensure understanding.
"Eight add seven equals fifteen. Write 5 in the units column and carry one ten into the tens column. 40 add 30 and the ten we carried across equals 80. Write 8 (80) in the tens column. The answer is 85."

The digit that has been 'carried' should be recorded above the line.

When the children are confident, extend with examples where it is necessary to bridge across the tens and the hundreds.

$$88 + 37 = 125$$

$$\begin{array}{r} 80 \quad 8 \\ + 30 \quad 7 \\ \hline 110 \quad 15 \end{array} = 125$$

"Partition the numbers into tens and ones/units. Add the units and then add the tens. Recombine to give the answer."

Then...

$$\begin{array}{r} 88 \\ + 37 \\ 15 \quad (8 + 7) \\ + 110 \quad (80 + 30) \\ \hline 125 \end{array}$$

Add the units together first and then the tens in preparation for the formal written method.

If children are ready introduce the formal written method, where it is necessary to 'carry' across the columns and bridge 100.



$$\begin{array}{r} 88 \\ + 37 \\ \hline 11 \\ \hline 125 \end{array}$$

Use the language of place value to ensure understanding. "Eight add seven equals 15. Write five in the units column and carry one ten across into the tens column. 80 add 30 and the 10 we carried across equals 120. Write 2 (20) in the tens column and carry one hundred into the hundreds column."

The digits that have been 'carried' should be recorded above the line in the correct column.

If children are confident, further develop with the addition of a three-digit to a two-digit number.

Addition – Year Four

- **Add numbers with up to four digits using the formal written method of columnar addition where appropriate.**

NB Ensure children are confident with the methods outlined in the previous year's guidance before moving on.

Continue to teach the use of the empty number line with three and four digit numbers as appropriate.

Further develop the formal written method of addition, with three-digit numbers. Revisit the **expanded method** first if necessary.

$$176 + 147 =$$

$$\begin{array}{r} 176 \\ + 147 \\ 13 \quad (6 + 7) \\ + 110 \quad (70 + 40) \\ \hline 200 \quad (100 + 100) \\ \hline 323 \end{array}$$

This will lead on to the **formal written method**.

$$\begin{array}{r} 177 \\ + 146 \\ \hline 11 \\ \hline 323 \end{array}$$

Use the language of place value to ensure understanding. "Seven add six equals 13. Write three in the units column and carry one ten across into the tens column. 70 add 40 and the 10 we carried across equals 120. Write 2 (20) in the tens column and carry one hundred into the hundreds column. 100 add 100 and the 100 that has been carried equals 300. Write 3 in the hundreds column (300)."

Digits that have been 'carried' should be recorded above the line in the correct column.

If children are confident introduce the addition of a four-digit number and a three-digit number. Continue to develop with addition of two four-digit numbers and with decimals (in the context of money or measures.)

Stages in Subtraction

Subtraction – Early Stages (EYFS)

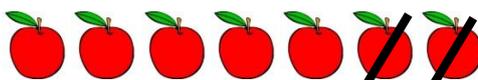
Children will engage in a wide variety of songs and rhymes, games and activities.

In practical activities and through discussion they will begin to use the vocabulary associated with subtraction.

They will find one less than a given number.

They will begin to relate subtraction to ‘taking away’ **using objects** to count ‘how many are left’ after some have been taken away.

$$7 - 2 = 5$$



“Take two apples away. How many are left?”

Children will begin to count back from a given number.

Subtraction – Year One

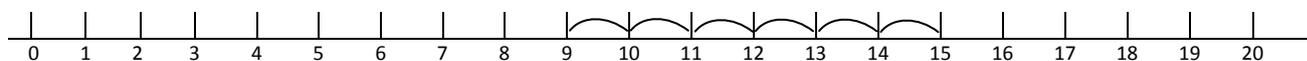
- **Given a number, identify one less**
- **Read, write and interpret mathematical statements involving the subtraction (-) and equals (=) sign**
- **Subtract one-digit and two-digit numbers within twenty, including zero.**
- **Solve missing number problems eg $20 - \square = 16$**

NB Ensure children are confident with the methods outlined in previous year’s guidance before moving on.

Children will continue to practise counting back from a given number.

Initially use a number track or marked number line to count back for subtraction.

$$15 - 6 = 9$$



“Put your finger on number 15 and count back 6.”

NB Ensure children are confident with using a **marked number line** before moving on to an **empty number line** (see year two guidance.)

Continue to practise counting back for subtraction with numbers within twenty.

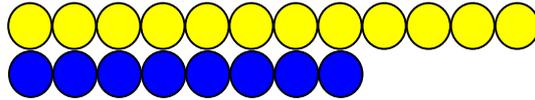
Counting on to find a small difference:

Introduce complimentary addition to find differences (only use for small differences). The use of models is extremely important here to understand the idea of ‘difference’.

Count up from the smallest number to the largest to find the difference using resources, eg cubes, beads, number tracks/lines.



$$12 - 8 = 4$$



“The difference between eight and twelve is four.”

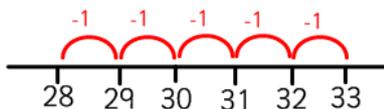
Subtraction – Year Two

- **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**

NB Ensure that children are confident with the methods outlined in the previous year’s guidance before moving on.

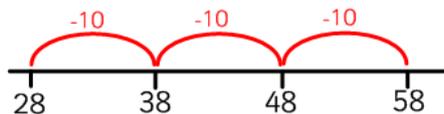
Counting back using an **empty number line** within 100 in ones.

$$33 - 5 = 28$$



Counting back using an **empty number line** within 100, in tens.

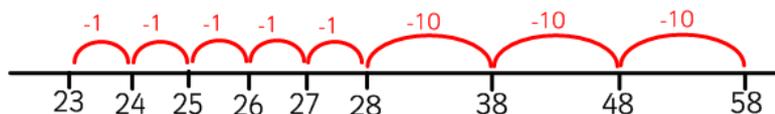
$$58 - 30 = 28$$



Use in conjunction with a 100 square to show jumps.

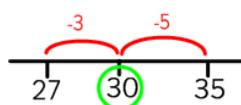
Partitioning into tens and units on an **empty number line**.

$$58 - 5 = 53$$



Partitioning the units to subtract to nearest ten.

$$35 - 8 = 35 - 5 - 3 = 27$$

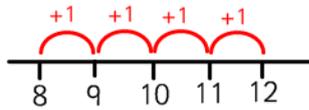


Counting on to find a small difference

Introduce complimentary addition to find differences (only use for small differences). The use of models is extremely important here to understand the idea of 'difference' (see Y1 guidance).

Count up from the smallest number to the largest to **find the difference**.

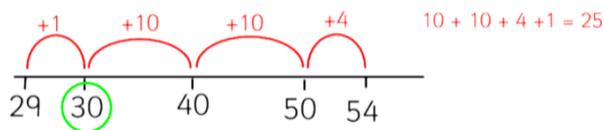
$$12 - 8 = 4$$



"The difference between 8 and 12 is 4."

If children are confident, further develop this method.

$$54 - 29 = 25$$



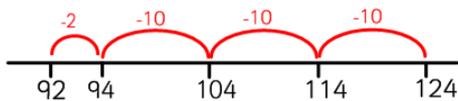
Subtraction – Year Three

- **Subtract numbers with up to three digits, using formal written method of columnar subtraction.**

NB Ensure that children are confident with the methods outlined in the previous year's guidance before moving on.

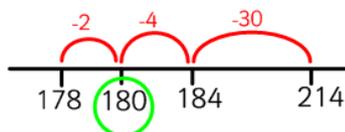
Further develop the use of the empty number line with calculations that bridge 100.

$$124 - 32 = 92$$

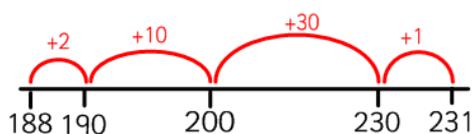


Extend with larger numbers and more efficient jumps **counting back on an empty number line**....

$$214 - 36 = 178$$



... and by **counting on to find the difference**.



"The difference between 231 and 188 is 43."

Introduce the **expanded written method** with the calculation presented both horizontally and vertically (in columns). Use two digit numbers when introducing this method initially.

$$89 - 35 = 54$$

$$\begin{array}{r} 80 & 9 \\ - 30 & 5 \\ \hline 50 & 4 \end{array} = 54$$

“Partition into tens and ones/units. Subtract the units then subtract the tens. Recombine to give the answer.”

In this example decomposition (exchange) is not required.

This will lead into the **formal written method**.

$$\begin{array}{r} 89 \\ - 35 \\ \hline 54 \end{array}$$

Use the language of place value to ensure understanding. “Nine subtract five, eighty subtract thirty.”

Introduce the **expanded written method** where **exchange/decomposition** is required.

$$72 - 34 = 38$$

$$\begin{array}{r} 60 & 12 \\ 70 & 2 \\ - 30 & 4 \\ \hline 30 & 8 \end{array} = 38$$

Base ten materials could be used to support this.

When children are confident with the expanded method introduce the **formal written method**, involving decomposition/exchange.

$$\begin{array}{r} 6 \\ 7 & 12 \\ - 3 & 4 \\ \hline 3 & 8 \end{array}$$

Use the language of place value to ensure understanding. “We cannot subtract four from two so we need to exchange a ten for ten ones. “

If children are confident, extend to numbers over 100, returning to the expanded method first if necessary.

$$246 - 138 = 108$$

$$\begin{array}{r} & 30 & 16 \\ 200 & 40 & 6 \\ - 100 & 30 & 8 \\ \hline 100 & 0 & 8 \end{array} = 108$$

Use base ten materials to support understanding.

If children are confident with the expanded method move on to the **formal written method**.

$$\begin{array}{r} & 3 \\ 2 & 4 & 16 \\ - 1 & 3 & 8 \\ \hline 1 & 0 & 8 \end{array}$$

Subtraction – Year Four



- Subtract numbers with up to four digits, using formal written method of columnar subtraction where appropriate.

NB Ensure children are confident with the methods outlined in the previous year's guidance before moving on.

Continue to teach the use of **empty number lines** with three and four digit numbers as appropriate.

Develop the formal written method involving decomposition where it is necessary to exchange from the hundreds column.

$$\begin{array}{r} 1 \\ 2 \ 15 \ 8 \\ - \quad 7 \ 5 \\ \hline 1 \ 8 \ 3 \end{array}$$

Use the language of place value to ensure understanding.

Further develop by subtracting a three-digit from a three-digit number where it is necessary to exchange from both the tens and hundreds columns.

Use expanded written method initially if necessary.

$$236 - 148 = 88$$

$$\begin{array}{r} 100 \quad 120 \quad 16 \\ 200 \quad 30 \quad 6 \\ - 100 \quad 40 \quad 8 \\ \hline 0 \quad 80 \quad 8 = 88 \end{array}$$

This leads to the formal written method.

$$\begin{array}{r} 1 \quad 12 \\ 2 \ 3 \ 16 \\ - 1 \ 4 \ 8 \\ \hline 8 \ 8 \end{array}$$

When children are confident, develop with four-digit numbers and decimal numbers (in the context of money or measures).

$$2752 - 1564 = 1188$$

$$\begin{array}{r} 6 \ 14 \\ 2 \ 7 \ 5 \ 12 \\ - 1 \ 5 \ 6 \ 4 \\ \hline 1 \ 1 \ 8 \ 8 \end{array}$$

Stages in Multiplication



Multiplication – Early Stages (EYFS)

Children will engage in a wide variety of songs and rhymes, games and activities.

In practical activities and through discussion they will begin to solve problems involving doubling.

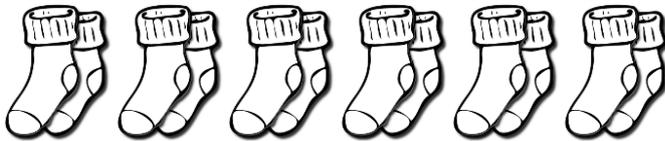


“Three apples for you and three for me. How many apples altogether?”

Multiplication – Year One

- Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
- Count in multiples of twos, fives and tens.

Children will count repeated groups of the same size in practical contexts. They will use the vocabulary associated with multiplication in practical contexts. They will solve practical problems that involve combining groups of 2, 5 or 10. eg. Socks, fingers and cubes.

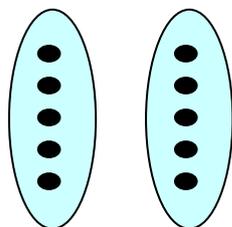


“Six pairs of socks. How many altogether? 2,4,6,8,10,12”

Use **arrays** to support early multiplication.



“Five groups of two faces. How many faces altogether? 2, 4, 6, 8, 10
Two groups of five faces. How many faces altogether? 5, 10”



“Two groups of five.”
“ $5 + 5 = 10$ ”
Double five is ten.”

Continue to solve problems in **practical contexts** and develop the language of early multiplication, with appropriate resources, throughout Y1.

Multiplication – Year Two

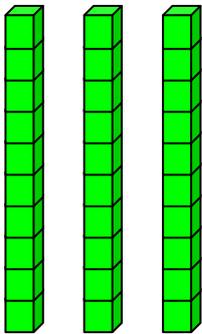


- Recall and use multiplication facts for the 2, 5 and 10 multiplication tables
- Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (x) and equals (=) signs.
- Solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in context.
- Show that multiplication can be done in any order (commutative).

NB Ensure that children are confident with the methods outlined in previous year's guidance before moving on.

Children will use a range of vocabulary to describe multiplication and use practical resources, pictures, diagrams and the x sign to record.

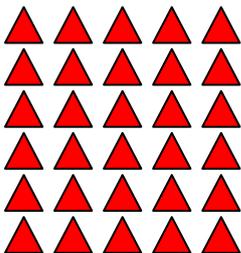
Combining Groups (repeated addition)



"3 groups of 10 cubes."
"How many cubes altogether?"
" $10 + 10 + 10 = 30$ "
"3 times 10"
" $3 \times 10 = 30$ " " $10 \times 3 = 30$ "

Using arrays to support multiplication

$$6 \times 5 = 30$$



" $5 + 5 + 5 + 5 + 5 + 5 = 30$ "
"6 rows of 5"
"6 groups of 5"
"5 groups of 6"
" $5 \times 6 = 30$ "
" $6 \times 5 = 30$ "

Multiplication – Year Three

- Recall and use multiplication facts for the 3, 4 and 8 multiplication tables. (Continue to practise the 2, 5 and 10 multiplication tables.)
- Write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to a formal written, method.

NB Ensure that children are confident using the methods outlined in the previous year's guidance before moving on.

Partitioning method for multiplication of a teen number by a one-digit number.



$$13 \times 5 = 65 \quad (\text{Partition } 13 \text{ into } 10 \text{ and } 3)$$

$$10 \times 5 = 50$$

$$3 \times 5 = 15$$

$$50 + 15 = 65$$

Grid method (Teen number multiplied by a one-digit number)

$$13 \times 8 = 104$$

x	10	3
8	80	24

$$80 + 24 = 104$$

“Partition 13 into 10 and 3. Multiply each number by 8. Add the partial products (80 and 24) together.”

This will lead to the **ladder method** of expanded short multiplication.

$$\begin{array}{r} 13 \\ \times 8 \\ \hline 24 \quad (8 \times 3) \\ + 80 \quad (8 \times 10) \\ \hline 104 \end{array}$$

Multiplication – Year Four

- Recall and use multiplication facts for multiplication tables up to 12 x 12
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.

NB Ensure that children are confident with methods outlined in previous year’s guidance before moving on.

Further develop the **grid method** for two-digit numbers multiplied by a one-digit number.

$$38 \times 6 = 228$$

x	30	8
6	180	48

$$180 + 48 = 228 \quad (\text{Add the partial products})$$

This leads to **expanded short multiplication/ ladder method**.

$$\begin{array}{r} 38 \\ \times 6 \\ \hline 48 \quad (6 \times 8) \\ + 180 \quad (6 \times 30) \\ \hline 228 \end{array}$$

Move on to three-digit numbers multiplied by a one-digit number using **grid method** and then **ladder method/expanded short multiplication**.



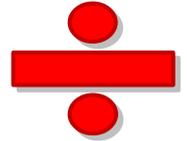
$$146 \times 5 = 730$$

x	100	40	6
5	500	200	30

$$500 + 200 + 30 = 730 \quad (\text{Add the partial products})$$

$$\begin{array}{r} 146 \\ \times \quad 5 \\ \hline 30 \quad (5 \times 6) \\ 200 \quad (5 \times 40) \\ + \quad 500 \quad (5 \times 100) \\ \hline 730 \end{array}$$

Stages in Division



Division – Early Stages (EYFS)

Children will engage in a wide variety of songs and rhymes, games and activities.

In practical activities and through discussion they will begin to solve problems involving halving and sharing.



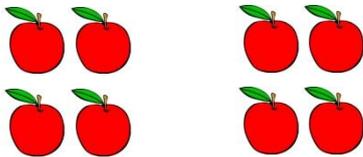
“Share the apples between two people.
Half of the apples for you and half for me”

Division – Year One

- Solve one-step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
- Count in multiples of twos, fives and tens.

Children start with practical **sharing** using a variety of resources. They will share objects into **equal groups** in a variety of situations. They will begin to develop the vocabulary associated with division in practical contexts.

“Share these apples equally between two children. How many apples will each child have?”

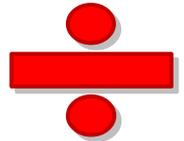
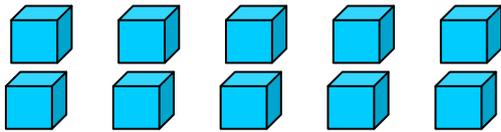


Children will move from **sharing** to **grouping** in a practical way.

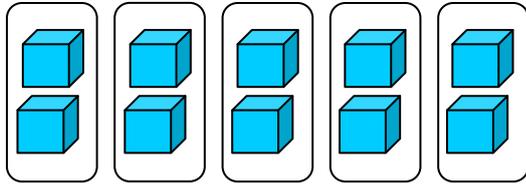
“Put 15 cakes into groups of 5. How many plates will we need?”



Use **arrays** to support early division.



“How many cubes altogether? How many groups of two?”



“Five groups of two.”

Continue to solve problems in practical contexts throughout Y1, and develop the language of early division, with appropriate resources.

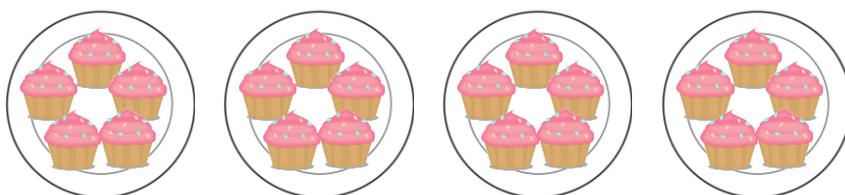
Division – Year Two

- **Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.**
- **Calculate mathematical statements for division within the multiplication tables they know and write them using the division (\div) and equals ($=$) signs.**
- **Solve problems involving division, using materials, arrays, repeated subtraction, mental methods, and multiplication and division facts, including problems in context.**

NB Ensure children are confident with the methods outlined in the previous year’s guidance before moving on.

Children will use a range of vocabulary to describe division and use practical resources, pictures, diagrams and the \div sign to record, using multiples that they know.

Sharing and grouping



“20 cakes shared equally between 4 plates.” (Sharing)

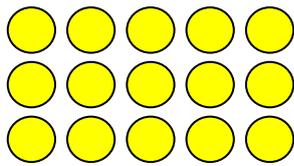
“We have 20 cakes and we put 5 on each plate. How many plates do we need?” (Grouping)

$$20 \div 4 = 5 \quad 20 \text{ divided by } 4 \text{ equals } 5$$
$$20 \div 5 = 4 \quad 20 \text{ divided by } 5 \text{ equals } 4$$

Using arrays to support division

$$15 \div 5 = 3$$

$$15 \div 3 = 5$$



“How many groups of three?”

“How many groups of five?”

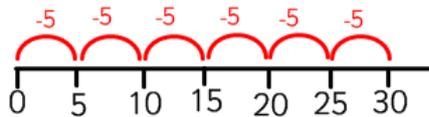
“15 shared between 3 people is...?”

“15 shared between 5 people is...?”

“15 divided by 3 equals 5”

“15 divided by 5 equals 3”

When children are ready use an empty number line to count backwards. (Repeated subtraction.)



“How many groups of five?”

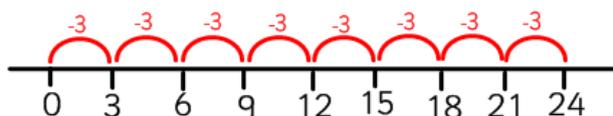
Division – Year Three

- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. (Continue to practise the 2, 5 and 10 multiplication tables.)
- Write and calculate mathematical statements for division using the multiplication tables they know including for two-digit numbers divided by one-digit numbers, using mental and progressing to a formal written method.

NB Ensure that children are confident with the methods outlined in the previous year’s guidance before moving on.

Continue to use practical resources, pictures, diagrams, number lines, arrays and the \div sign to record, using multiples they know, as appropriate.

Use an empty number line to count backwards. (Repeated subtraction.)



“How many groups of 3 in 24?”

Introduce the formal layout using multiplication/division facts that the children know.

$$24 \div 3 = 8$$

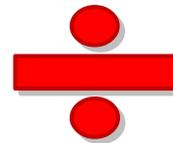
This can also be recorded as....

$$\begin{array}{r} 8 \\ 3 \overline{)24} \end{array}$$

“Twenty four divided by three equals eight.”

“How many threes are there in twenty four?”

Division – Year Four



- Recall multiplication and division facts for multiplication tables up to 12 x 12.
- Use place value, known and derived facts to divide mentally.
- Divide two-digit and three-digit numbers by a one-digit number using formal written layout.

NB Ensure that children are confident with the methods outlined in the previous year's guidance before moving on.

Continue to write and calculate mathematical statements for division using the multiplication tables that the children know.

$$32 \div 8 = 4$$

Continue using the **formal written layout** using multiplication tables they know.

$$\begin{array}{r} 4 \\ 8 \overline{)32} \end{array}$$

“Thirty two divided by eight equals four.”

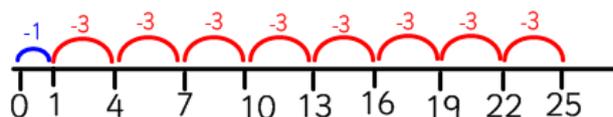
“How many eights are there in thirty two?”

Continue using the formal written layout, introducing remainders.

$$25 \div 3 = 8 \text{ r}1$$

$$\begin{array}{r} 8 \text{ r}1 \\ 3 \overline{)25} \end{array}$$

This could be modelled using an empty number line if necessary.



“Eight jumps of three and one left over.”

Division using the ladder method

$$47 \div 3 =$$

$$\begin{array}{r} 15 \text{ r}2 \\ 3 \overline{)47} \\ \underline{30} \quad (10 \times 3) \\ 17 \\ \underline{15} \quad (5 \times 3) \\ \underline{\quad} 2 \end{array}$$