
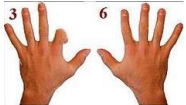



Reception Calculations	
<p>Key vocabulary</p> <p>Place value and number –tens, ones, equal, same as, more, less, digit, calculation, odd, even</p> <p>Addition – add, count on, altogether, total</p> <p>Subtraction – subtract, take away, count back</p> <p>Multiplication – groups of, lots of, double</p> <p>Division – sharing, half, halve</p>	
<u>Addition</u>	<u>Subtraction</u>
<p style="text-align: center;"><u>Modelling and Methods</u></p> <ul style="list-style-type: none"> - Children counting amounts within 10 using concrete objects (moving onto pictorial). - Children find one more than a concrete/pictorial amount. - Children investigate 'ways to make' by counting an amount and splitting in different ways. - Children combine two sets of concrete amounts and count total (moving onto pictorial). - Addition sign is introduced to combine sets of amounts and children are encouraged to use mathematical vocabulary. <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Add two amounts (within 10) using fingers.</p> <ul style="list-style-type: none"> - Children add by 'counting on'. - Children will use number lines to identify one more and to answer calculations. - Children will begin to understand 'number stories' and record calculation alongside this, using preferred </div>	<p style="text-align: center;"><u>Modelling and Methods</u></p> <ul style="list-style-type: none"> - Children count backwards. - Children count amounts within 10 using concrete objects then find one less by removing an object (moving onto pictorial). - Children count out a set of objects and remove a set amount to take away. - Children move onto pictorial and cross out what they are taking away. - Children are introduced to the subtraction sign and begin recording calculations. <div style="text-align: center;"> <p>5 – 3 =</p>  </div> <ul style="list-style-type: none"> - Children use fingers to count backwards. - Children subtract by 'counting back'. - Children will begin to use number lines to identify one less and to answer calculations. - Children will begin to understand 'number stories' and record calculation alongside this, using preferred method to solve: "I have 8 sausages and my dog eats 3, how many do I have left?" 8 – 3 = 5

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method to solve: "I have 3 sweets and I get 4 more, how many have I got altogether?" $3 + 4 = 7$

Multiplication

- Children will experience groups of equal amounts.
 - Children will count in 10's.
 - Children will count in 2's
- Children will use concrete/pictorial representations to count in 2's and recognise pairs.



- Children will begin to understand the concept of doubling and use concrete objects to find doubles within 20.

Division

- Children will understand the concept of half and use practical objects to find half – understanding it is fair, equal and 'the same as'.
- Children find half of amounts by splitting concrete objects practically. They will begin to recognise that we can't split some amounts equally. They will be able to say half of __ is __.
- Children will experience dividing as sharing equally. They will do this practically sharing objects with peer/teddies/teacher etc. They will share amounts equally between more than 2.

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Year 1 Calculations

Key vocabulary

Place value and number – hundreds, tens, ones, equal, same as, more, less, digit, calculation, partitioning, partition, odd, even

Addition – add, sum, plus, count on, altogether, total

Subtraction – subtract, take away, count back, finding the difference

Multiplication – multiply, times, lots of, groups of, double, array, commutative, repeated addition

Division – sharing, grouping, divided by, dividing, half, halve, jotting

Addition

+ = signs and missing numbers

Children need to understand the concept of equality before using the '=' sign.

Calculations should be written either side of the equality sign so that the sign is not just interpreted as 'the answer'.

Introduce the children to the understanding that '=' means 'the same as'.

$$2 = 1 + 1$$

$$2 + 3 = 4 + 1$$

$$3 = 3$$

$$2 + 2 + 2 = 4 + 2$$

Missing numbers need to be placed in all possible places.

$$3 + 4 = \square \quad \square = 3 + 4$$

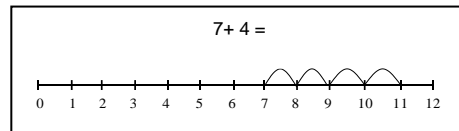
$$3 + \square = 7 \quad 7 = \square + 4$$

$$\square + 4 = 7 \quad 7 = 3 + \square$$

$$\square + \nabla = 7 \quad 7 = \square + \nabla$$

Modelling and Methods

- concrete objects
- 'counting on' on fingers
- Jumping forward on number line →
- 100 square
- Partitioning
- Partitioning on 100 square (jumping down in tens and forwards in ones)



Subtraction

- = signs and missing numbers

Missing numbers need to be placed in all possible places.

$$7 - 3 = \square \quad \square = 7 - 3$$

$$7 - \square = 4 \quad 4 = \square - 3$$

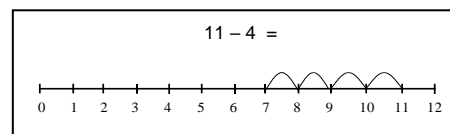
$$\square - 3 = 4 \quad 4 = 7 - \square$$

$$\square - \nabla = 4 \quad 4 = \square - \nabla$$

Calculations should be written either side of the equality sign so that the sign is not just interpreted as 'the answer'.

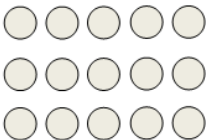
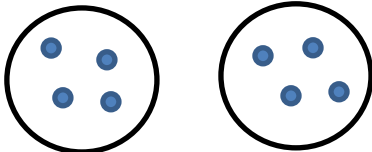
Modelling and Methods

- Taking away concrete objects.
- Counting backwards on fingers.
- Jumping backwards on number line.



- Introduce 'finding the difference' and find the difference by finding two numbers on number line and counting jumps in between.
- Apply both these skills on a 100 square.
- Subtract using partitioning.
- Partitioning on a 100 square (jumping up in tens and back in ones)

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<p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>	<p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>
<p style="text-align: center;"><u>Multiplication</u></p>	<p style="text-align: center;"><u>Division</u></p>
<p>Multiplication is related to doubling and counting groups of the same size. Multiplication should focus in counting in groups of 2's, 5's and 10's with extension onto 3's.</p> <p style="text-align: center;"><u>Modelling and Methods</u></p> <ul style="list-style-type: none"> - First, understand multiplication as repeated addition. (2 groups of 3) $2 \times 3 =$ $3 + 3 =$ - Use physical objects to 'group' - Begin to recognise multiplication in an array (initially linked to repeated addition). <div style="text-align: center;">  </div> <p style="text-align: center;">$5 + 5 + 5 = 15$</p> <ul style="list-style-type: none"> - Understand the <u>commutativity</u> of multiplication using arrays. $5 \times 3 = 3 \times 5$ Group the array in both forms of the <u>calculation</u> - Children solve multiplication calculations by drawing their own arrays. <p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>	<p>Division is related to halving and sharing an amount into equal groups. Division should focus in sharing between 2, 5, 10 with extension between 3.</p> <p style="text-align: center;"><u>Modelling and Methods</u> <u>Sharing</u></p> <ul style="list-style-type: none"> - First understand we share an amount of objects into equal groups. $6 \div 2 =$ Share 6 objects <u>equally</u> between themselves and one other – one for me and one for you – until none left. How many does each person have? - Children move onto doing this using jottings. $8 \div 2 =$ <div style="text-align: center;">  </div> <p style="text-align: center;"><u>Grouping</u></p> <ul style="list-style-type: none"> - I have 15 bulbs and put 3 into each pot, how many pots do I have? <p>Split the whole amount (15) into groups of 3, how many groups can I make?</p> <p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

Year 2 Calculations

Key Vocabulary

All vocabulary as in Year 1 plus
 Place value - > greater than, < less than
 Addition/Subtraction – inverse, commutative, associative, column addition, column subtraction,
 Multiplication/Division – column multiplication, bus-stop method, written method for division, remainder

Addition

+ = signs and missing numbers

Continue using a range of equations as in Year 1 but with appropriate, larger numbers. extend to balancing equations

$14 + 5 = 10 + \square$

and

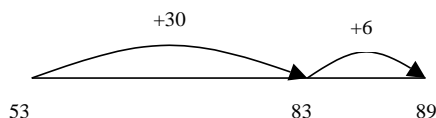
$32 + \square + \square = 100$ $35 = 1 + \square + 5$

Calculations should have missing numbers and = in all possible places for varied fluency.

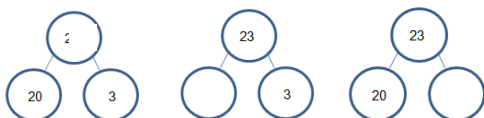
Modelling and Methods

- Jumping forward on a 100 square
- Partitioning on a 100 square (down in tens and forward in ones)
- Partitioning on a numberline

$\square = 53 + 36$



- Partitioning using part-whole model for missing numbers and relationship to subtraction and the **inverse**.



When adding 3 single-digit numbers pupils are taught they are **associative**

$3 + 2 + 1 = 6$ ($3 + 2 = 5 + 1 = 6$) ($3 + 1 = 4 + 2 = 6$) ($1 + 2 = 3 + 3 = 6$)

- Pupils are introduced to the formal written method of column addition.

Subtraction

= - signs and missing numbers

Continue using a range of equations as in Year 1 but with appropriate numbers.

Extend to $14 + 5 = 20 - \square$

Calculations should have missing numbers and = in all possible places for varied fluency.

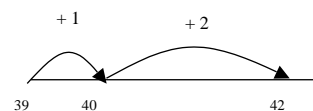
Modelling and Methods

- Jumping backwards on a 100 square
- Partitioning on a 100 square (up in tens and backwards in ones)
- Partitioning on a numberline counting backwards – inverse to addition

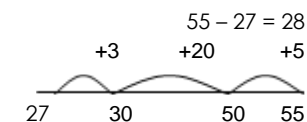
Finding the difference

Find a small difference by counting up

$43 - 39 =$




Find the difference and look at relationship between -/+



$55 - 27 = 28$ $27 + ? = 55$ $55 - ? = 27$
 $? + 27 = 55$

- Pupils are introduced to the formal written method of column subtraction.

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<p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>	<p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>
<p style="text-align: center;"><u>Multiplication</u></p>	<p style="text-align: center;"><u>Division</u></p>
<p><u>x = signs and missing numbers</u></p> <p> $7 \times 2 = \square$ $\square = 2 \times 7$ $7 \times \square = 14$ $14 = \square \times 7$ $\square \times 2 = 14$ $14 = 2 \times \square$ $\square \times \nabla = 14$ $14 = \square \times \nabla$ </p>	<p><u>÷ = signs and missing numbers</u></p> <p> $6 \div 2 = \square$ $\square = 6 \div 2$ $6 \div \square = 3$ $3 = 6 \div \square$ $\square \div 2 = 3$ $3 = \square \div 2$ $\square \div \nabla = 3$ $3 = \square \div \nabla$ </p>
<p style="text-align: center;"><u>Modelling and Methods</u></p> <ul style="list-style-type: none"> - Repeated edition - Arrays - Children solve multiplication calculations by drawing their own arrays using times tables that are relevant to year group (2's, 5's, 10's, 3's and extension to 4's) - Children are encouraged to count in multiples rather than counting individual dots within arrays. - Children are introduced to the formal written method for multiplication (2-digit x 1-digit number - no carrying) 	<p style="text-align: center;"><u>Modelling and Methods</u></p> <p style="text-align: center;"><u>Sharing</u></p> <ul style="list-style-type: none"> - Children share out total amount in relevant multiples using jottings as previously. <p style="text-align: center;"><u>Grouping</u></p> <ul style="list-style-type: none"> - Counting in groups of until total is found (in relevant multiples). <p style="text-align: center;">$15 \div 5 = 3$</p> 
<p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>	<ul style="list-style-type: none"> - Children are introduced to the formal written method for division – referred to as the 'bus-stop method' but also labelled formal written method. - Children should divide by relevant times tables to year group. - Introduce concept of a remainder when dividing (still no carrying). This is recorded as r $16 \div 3 = 5 \text{ r}1$ <p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

Year 3 Calculations

Key vocabulary

Place value and number – thousands, hundreds, tens, ones, equal, same as, more, less, digit, calculation, partitioning, partition, inverse

Addition – add, sum, plus, count on, altogether, commutative, associative, column addition, written method, carrying, total, sum

Subtraction – subtract, take away, count back, column subtraction, written method, exchanging

Multiplication – multiply, times, lots of, groups of, double, array, commutative, carrying, product

Division – divided by, dividing, bus-stop, written method, carrying

Addition

+ = signs and missing numbers

Continue using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column addition.

(step 2)

$$\begin{array}{r} 321 \\ + 435 \\ \hline 756 \end{array}$$

(step 3)

$$\begin{array}{r} 324 \\ + 218 \\ \hline 542 \end{array}$$

(step 4)

$$\begin{array}{r} 673 \\ + 276 \\ \hline 949 \end{array}$$

Also include: 2-digit + 2-digit, 2-digit + 1-digit and 3-digit + 2-digit (including carrying) to ensure secure understanding of place value.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Subtraction

- = signs and missing numbers

Continue using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column subtraction.

(step 2)

$$\begin{array}{r} 575 \\ - 214 \\ \hline 361 \end{array}$$

(step 3)

$$\begin{array}{r} 6 \\ 473 \\ - 138 \\ \hline 335 \end{array}$$

(step 4)

$$\begin{array}{r} 3 \\ 409 \\ - 147 \\ \hline 262 \end{array}$$

Also include: 2-digit – 2-digit, 2-digit – 1-digit and 3-digit – 2-digit (including exchanging) to ensure secure understanding of place value.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

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Multiplication

x = signs and missing numbers

Continue using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column multiplication. Children should multiply by relevant Y3 tables (2's, 3's, 4's, 5's, 6's, 8's and 10's)

(step 2)
$$\begin{array}{r} 17 \\ \times 5 \\ \hline 85 \end{array}$$

(step 4)
$$\begin{array}{r} 217 \\ \times 3 \\ \hline 651 \end{array}$$

(step 5)
$$\begin{array}{r} 293 \\ \times 2 \\ \hline 586 \end{array}$$

Ensure children are aware of the commutative properties of multiplication when solving calculations. Children use the inverse to solve problems and check answers.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Division

÷ = signs and missing numbers

Continue using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method for division – short division (bus stop method). Children should divide by relevant Y3 tables (2's, 3's, 4's, 5's, 6's, 8's and 10's)

(step 2)
$$\begin{array}{r} 324 \\ 2 \overline{)648} \end{array}$$

(step 3)
$$\begin{array}{r} 24 \\ 3 \overline{)72} \end{array}$$

(step 4)
$$\begin{array}{r} 9 \\ 3 \overline{)27} \end{array}$$

(step 5)
$$\begin{array}{r} 374 \\ 2 \overline{)748} \end{array}$$

Ensure children are aware that division is not commutative. Children use the inverse to solve problems and check answers.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

Year 4 Calculations

Key vocabulary

Place value and number – ten thousands, thousands, hundreds, tens, ones, equal, same as, more, less, digit, calculation, partitioning, partition, inverse

Addition – add, sum, plus, count on, altogether, commutative, associative, column addition, written method, carrying, total, sum

Subtraction – subtract, take away, column subtraction, written method, exchanging

Multiplication – multiply, times, lots of, groups of, double, commutative, carrying, product

Division – divided by, dividing, bus-stop, written method, carrying, divisor

Addition

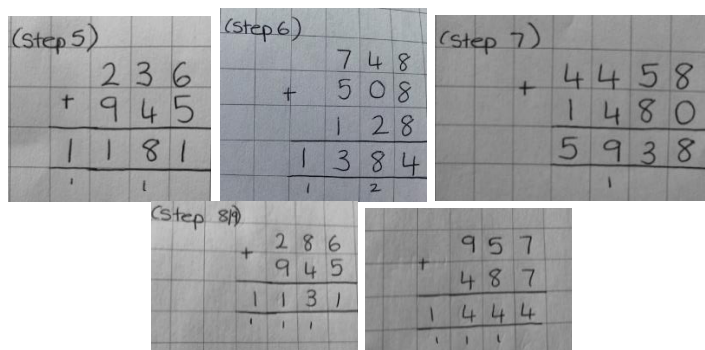
+ = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column addition.



Also include: 3-digit + 2-digit, 4-digit + 3-digit and 4-digit + 2-digit (including carrying) to ensure secure understanding of place value.

Ensure children are aware of the commutative and associative properties of addition when solving calculations. Children use the inverse to solve problems and check answers. Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Multiplication

Subtraction

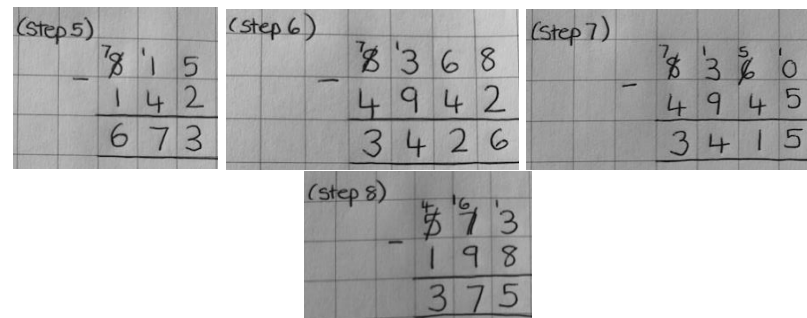
- = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column subtraction.



Also include: 3-digit – 2-digit, 4-digit – 3-digit and 4-digit – 2-digit (including exchanging) to ensure secure understanding of place value.

Ensure children are aware that subtraction is not commutative. Children use the inverse to solve problems and check answers. Children should solve calculations with a mixture of different digits to ensure secure place value understanding. Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Division

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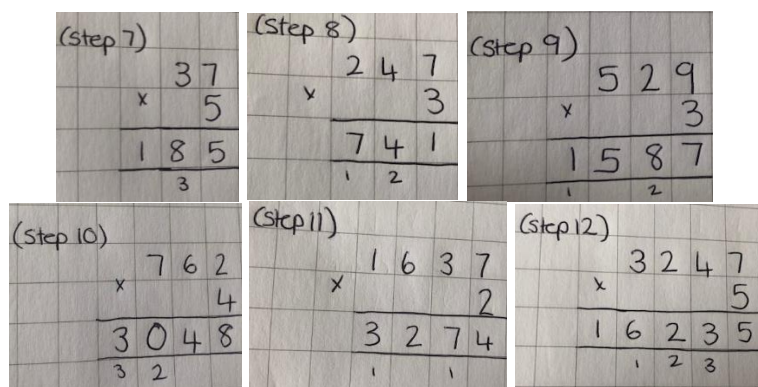
\times = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column multiplication. Children should multiply by any single digit.



Ensure children are aware of the commutative properties of multiplication when solving calculation. Children use the inverse to solve problems and check answers.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

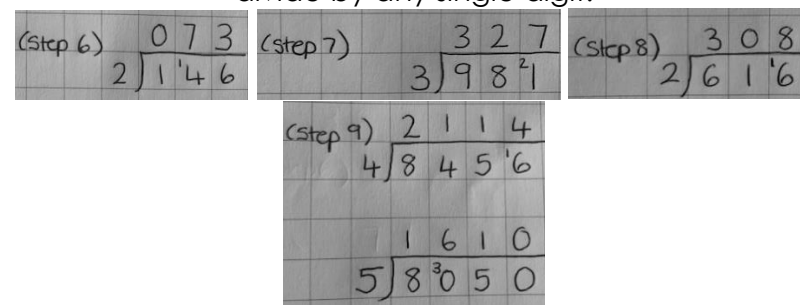
\div = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method for division – short division (bus stop method). Children should divide by any single digit.



Ensure children are aware that division is not commutative. Children use the inverse to solve problems and check answers.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

Year 5 Calculations

Key vocabulary

Place value and number – millions, hundred thousands, ten thousands, thousands, hundreds, tens, ones, tenths, decimal, equal, same as, more less, digit, calculation, partitioning, partition

Addition – add, sum, plus, count on, altogether, commutative, associative, column addition, written method, carrying, total, sum

Subtraction – subtract, take away, count back, inverse, column subtraction, written method, exchanging

Multiplication – multiply, times, lots of, groups of, double, commutative, carrying, product, factor, scale

Division – divided by, dividing, bus-stop, written method, carrying, remainders, tenths, dividend, divisor, decimal place, fraction, rounding

Addition

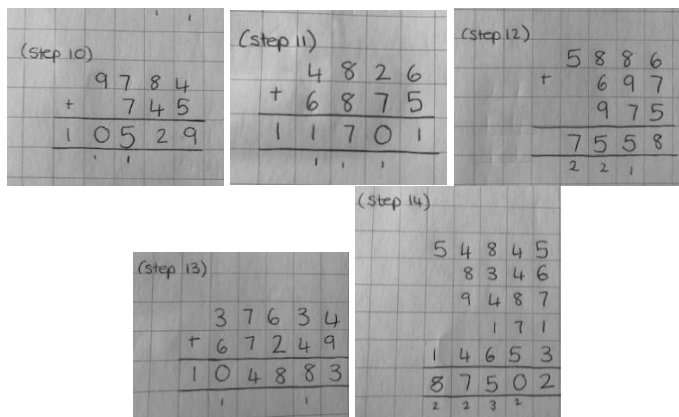
+ = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column addition.



Ensure children are aware of the commutative and associative properties of addition when solving calculations. Children use the inverse to solve problems and check answers. Children should solve calculations with a mixture of different digits to ensure secure place value understanding. Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

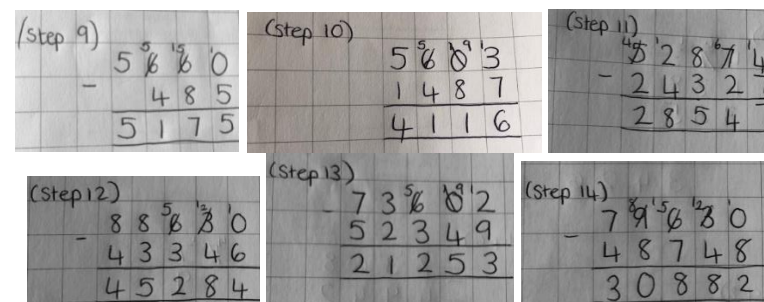
Subtraction

- = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers. **Calculations should have missing numbers and = in all possible places for varied fluency.**

Modelling and Methods

All children should be using the formal written method of column subtraction.



Ensure children are aware that subtraction is not commutative. Children use the inverse to solve problems and check answers. Children should solve calculations with a mixture of different digits to ensure secure place value understanding.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

Multiplication

x = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column multiplication.

(Step 13)
$$\begin{array}{r} 21795 \\ \times 3 \\ \hline 65385 \end{array}$$

(Step 14)
$$\begin{array}{r} 530645 \\ \times 4 \\ \hline 2122580 \end{array}$$

(Step 15)
$$\begin{array}{r} 237 \\ \times 20 \\ \hline 4740 \end{array}$$

(Step 16)
$$\begin{array}{r} 836 \\ \times 40 \\ \hline 33440 \end{array}$$

(Step 17)
$$\begin{array}{r} 14644 \\ \times 70 \\ \hline 1025080 \end{array}$$

(Step 18)
$$\begin{array}{r} 1795 \\ \times 300 \\ \hline 538500 \end{array}$$

(Step 3)
$$\begin{array}{r} 132 \\ \times 14 \\ \hline 528 \\ + 1320 \\ \hline 1848 \end{array}$$

(Step 4)
$$\begin{array}{r} 196 \\ \times 16 \\ \hline 1176 \\ + 1960 \\ \hline 3136 \end{array}$$

(Step 5)
$$\begin{array}{r} 576 \\ \times 19 \\ \hline 5184 \\ + 5760 \\ \hline 10944 \end{array}$$

(Step 7)
$$\begin{array}{r} 72 \\ \times 63 \\ \hline 216 \\ + 4320 \\ \hline 4536 \end{array}$$

(Step 8)
$$\begin{array}{r} 138 \\ \times 69 \\ \hline 1242 \\ + 8280 \\ \hline 9522 \end{array}$$

Ensure children are aware of the commutative properties of multiplication when solving calculation. Children use the inverse to solve problems and check answers.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Division

÷ = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method for division.

(Step 12)
$$\begin{array}{r} 157r1 \\ 3 \overline{)472} \end{array}$$

(Step 13)
$$\begin{array}{r} 22519r1 \\ 4 \overline{)900737} \end{array}$$

(Step 10)
$$\begin{array}{r} 176 \\ 3 \overline{)528} \end{array}$$

(Step 11)
$$\begin{array}{r} 1814 \\ 5 \overline{)9070} \end{array}$$

Ensure children are aware that division is not commutative. Children use the inverse to solve problems and check answers.

GD children who are secure with their understanding may move onto further steps in division in preparation for Year 6.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

Year 6 Calculations

Key vocabulary

Place value and number – millions, hundred thousands, ten thousands, thousands, hundreds, tens, ones, tenths, decimal, equal, same as, more less, digit, calculation, partitioning, partition

Addition – add, sum, plus, count on, altogether, commutative, associative, column addition, written method, carrying, total, sum

Subtraction – subtract, take away, count back, inverse, column subtraction, written method, exchanging

Multiplication – multiply, times, lots of, groups of, double, commutative, carrying, product, factor, scale

Division – divided by, dividing, bus-stop, written method, carrying, remainders, tenths, dividend, divisor, quotient, decimal place, fraction, long division, rounding

Addition

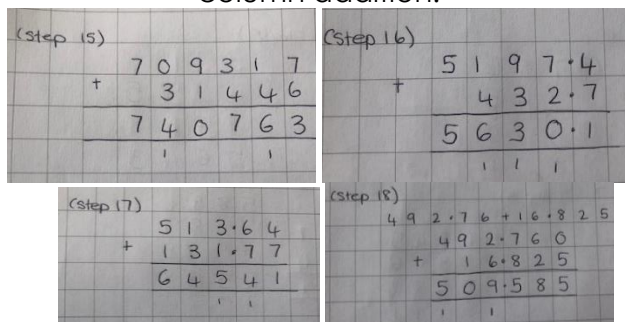
+ = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column addition.



Ensure children are aware of the commutative and associative properties of addition when solving calculations. Children use the inverse to solve problems and check answers. Children should solve calculations with a mixture of different digits to ensure secure place value understanding.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

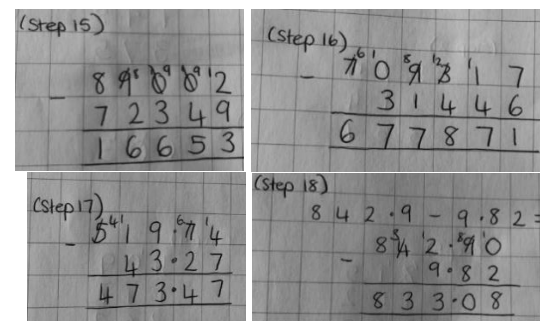
Subtraction

- = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers. **Calculations should have missing numbers and = in all possible places for varied fluency.**

Modelling and Methods

All children should be using the formal written method of column subtraction.



Ensure children are aware that subtraction is not commutative. Children use the inverse to solve problems and check answers. Children should solve calculations with a mixture of different digits to ensure secure place value understanding.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

Multiplication

x = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method of column multiplication.

Ensure children are aware of the commutative properties of multiplication when solving calculation. Children use the inverse to solve problems and check answers.

Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.

Division

÷ = signs and missing numbers

Continue using a range of equations as in previous years but with appropriate, larger numbers.

Calculations should have missing numbers and = in all possible places for varied fluency.

Modelling and Methods

All children should be using the formal written method for division.

496 ÷ 11 becomes

$$\begin{array}{r} 45 \text{ r } 1 \\ 11 \overline{) 496} \end{array}$$

Answer: $45 \frac{1}{11}$

NC – divide up to 4 digits by 2-digit number using short division.

(an example)

Christ Church C of E (c) Primary School Whole School Calculation Policy (4 operations)

	<p>432 ÷ 15 becomes</p> $ \begin{array}{r} 28 \text{ r}12 \\ 15 \overline{) 432} \\ \underline{300} \\ 132 \\ \underline{120} \\ 12 \end{array} $ <p>Answer: 28 remainder 12</p>	<p>432 ÷ 15 becomes</p> $ \begin{array}{r} 28 \\ 15 \overline{) 432} \\ \underline{300} \quad 15 \times 20 \\ \underline{132} \\ \underline{120} \quad 15 \times 8 \\ 12 \end{array} $ $ \frac{12}{15} = \frac{4}{5} $ <p>Answer: 28 $\frac{4}{5}$</p>	<p>432 ÷ 15 becomes</p> $ \begin{array}{r} 28 \cdot 8 \\ 15 \overline{) 432 \cdot 0} \\ \underline{30} \quad \downarrow \\ \underline{132} \quad \downarrow \\ \underline{120} \quad \downarrow \\ \underline{120} \\ 0 \end{array} $ <p>Answer: 28.8</p>
<p>Ensure children are aware that division is not commutative. Children use the inverse to solve problems and check answers.</p> <p>Children will be given opportunities to apply their understanding of methods in problem solving and reasoning scenarios.</p>			