Calculation Policy

Addition

2024

**Addition:**

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| **EYFS:** |  |  |  |
| **Vocabulary:** | ﬁrst, then, now, add, plus, altogether, total, part, whole | **Manipulatives & scaffolds:** | Fingers  Five frames  Ten frames  Double sided counters  Numicon  Cubes  Bead strings  Part-whole model |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Combining two groups | Children begin to combine 2 groups of objects to find how many there are altogether |  | How many \_\_\_ can you see?  How many \_\_\_ can you see?  How many can you see altogether? |
| 1 more | A group of red circles  Description automatically generated  There are 7 altogether.  1 more than 6 is 7.  7 is 1 more than 6. | There are 7 (starfish).  1 more than 7 is 8.  8 is 1 more thn 7. | There are \_\_\_  There are \_\_\_ altogether.  \_\_\_ is 1 more than \_\_\_  1 more than \_\_\_ is \_\_\_ |
| Combine two groups | There are 3 here and 4 there.  There are 7 altogether.  3 and 4 make 7. | There are 4 dots and 2 dots.  There are 6 altogether.  4 and 2 make 6. | There are \_\_\_ here and \_\_ there.  There are \_\_\_ altogether.  \_\_\_ and \_\_\_ make \_\_\_ |
| Bonds to 10 (2 parts) | A green and blue traffic lights  Description automatically generated  The whole is 10.  6 is a part and4 is a part.  6 and 4 are a bond to 10.  If 6 is a part then the other part must be 4. | The whole is 10  If 6 is a part then the other part must be 4.  6 and 4 are a bond to 10. | The whole is \_\_\_  \_\_\_ is a part and \_\_\_ is a part  \_\_\_ and \_\_\_are a bond to 10  If \_\_\_ is a part, then the other part must be \_\_\_ |
| Bonds to 10 (3 parts) | Use 3 Numicon pieces to cover a 10 piece.  The whole is 10. I can see that 10 is made up of 6 and 3 and 1. | A group of colorful circles  Description automatically generated  There are 10 counters, the whole is 10.  I can see that 10 is made up of 5 and 4 and 1. | I can see that 10 is made up of \_\_\_ and \_\_\_ and \_\_\_. |
| Adding more | Use ‘first, then, now’ number stories to find the answer to the question “How many now?” by providing meaningful contexts      First there were 5 people.  Then there were 3 more.  Now there are 8. |  | First there were \_\_\_  Then \_\_\_ more were added.  Now there are \_\_\_  There are \_\_\_ altogether |
| How many did I add? | Provide children with ‘first, then, now’ number stories where the ‘then’ part is missing:  “There were 6 children on the bus, then we don’t know how many more got on, but now there are 8 children on the bus.    Represent the starting number with yellow counters and then add red counters until they reach the total amount. The number of red counters represents the number that has been added. |  | First there were \_\_\_  Now there are \_\_\_  \_\_\_ were added  I added \_\_\_ |
| **Y1** |  |  |  |
| **Vocabulary:** | add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double | **Manipulatives & scaffolds:** | Ten frames  Double sided counters  Numicon  Cubes  Bead strings  Part-whole model  Bar model |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Understand part and whole relationships |  | \_\_ is a part  \_\_ is a part  The whole is \_\_ | ­\_\_ is a part  \_\_ is a part  The whole is \_\_ |
| Write number sentences | Here are some counters. Group the counters by colour.  \_\_ red counters plus \_\_ yellow counters is equal to \_\_ counters. | 2 + 3 = 5 | A picture containing sketch, diagram, circle, design  Description automatically generated |
| Fact families – addition facts |  | A picture containing line, rectangle, diagram, screenshot  Description automatically generated | 5 + 1 = 6  1 + 5 = 6  6 = 5 + 1  6 = 1 + 5 |
| Number bonds within 10 | 3 + 2 = 5 |  | 4 + 2 = 6 |
| Add together | 4 + 3 = 7 | 3 + 4 = 7 | 4 + 3 = 7 |
| Add more | Put 2 counters in a tens frame. Now add 8 more counters.  How many counters are there altogether? | A picture containing font, text, number, line  Description automatically generated4 + 3 = |  |
| Add by counting on within 20 | First  Then  Now  First there were 5 counters  Then I added 3  Now there are 8 counters | A picture containing text, screenshot, font, line  Description automatically generated | A picture containing line  Description automatically generated |
| Adding ones using number bonds | 14 + 2 = | 14 + 2 = | 12 + 4 = |
| Find and make number bonds to 20 | 16 + 4 = 20 | 4 + 16 = 20 | 20 = \_\_ + \_\_  20 = \_\_ + \_\_ |
| Doubles | Double 7 is\_\_ | A picture containing rectangle  Description automatically generatedDouble 4 is \_\_ | Double \_\_ is \_\_ |
| Near doubles | 6 + 7 =  6 + 6 + 1 =  Double 6 + 1 = |  | Use doubles to work out the near doubles:  4 + 5 =  6 + 7 =  8 + 7 = |
| **Y2** |  |  |  |
| **Vocabulary:** | add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, commutative | **Manipulatives & scaffolds:** | Ten frames  Double sided counters  Numicon  Cubes  Base 10/Dienes  Part-whole model  Bar model  Number line  Place value charts |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Bonds to 10 | \_\_ + \_\_ = 10 | 5 + \_\_ = 10 | \_\_ + \_\_ = 10  10 = \_\_ + \_\_ |
| Fact families – addition bonds within 20 | \_\_ + \_\_ = \_\_  \_\_ + \_\_ = \_\_  \_\_ = \_\_ + \_\_  \_\_ = \_\_ + \_\_ |  | \_\_ + \_\_ = \_\_  \_\_ + \_\_ = \_\_  \_\_ = \_\_ + \_\_  \_\_ = \_\_ + \_\_ |
| Bonds to 100 (tens) | 4 = 6 = 10 40 + 60 = 100 | A picture containing font, symbol, line, design  Description automatically generated  3 + 4 = 7  30 + 40 = 70 | \_\_ + \_\_ = 100  100 = \_\_ + \_\_ |
| Add ones | 24 + 1 = 25 | A drawing of circles and lines  Description automatically generated | 46 + 1 =  46 + 2 =  46 + 3 = |
| Add by making 10 | 6 + 5 = 10 + 1  = 11 | A picture containing diagram, line, font, plot  Description automatically generated  6 + 5 = 10 + 1  = 11 | 7 + 4 = 11  *If I have seven, how many more do I need to make ten?*  *How many more do I need to add?* |
| Add three 1-digit numbers | 7 + 2 + 3 = | 4 + 6 + 6 = | 7 + 5 + 3 = |
| Add to the next 10 | The Base 10 shows 34  How many tens are there in 34?  What is the multiple of 10 after 34?  How many ones are there in 34?  How many more ones do I need to add to get to the next multiple of 10?  34 + \_\_ = \_\_ | A blue lines and dots  Description automatically generated  67 + \_\_ = 70 | 45 + \_\_ = 50  81 + \_\_ = 90  32 + \_\_ = 40 |
| Add across a ten | 38 + 5 = 40 + 3 | A picture containing diagram, line, plot, font  Description automatically generated | 67 + 5 = |
| 10 more | 25 + 10 = 35 | A drawing of a diagram  Description automatically generated | 25 + 10 = 35  10 + 25 = 35  35 = 25 + 10  35 = 10 + 25 |
| Add 10s | 57 + 30 = 87 | +  =  24 + 40 = 64 | 23 + 10  54 + 40 |
| Add two 2-digit numbers (not across a ten) |  | 45 + 34 = | 52 + 14  23 + 31 |
| Add two 2-digit numbers (across a ten) | 26 + 37 =  20 + 30 = 50  6 + 7 = 13  50 + 13 = 63 | 26 + 37 =  A white paper with blue writing on it  Description automatically generated  20 + 30 = 50  6 + 7 = 13  50 + 13 = 63 | 26 + 37  46 + 27 =  17 + 33 = |
| **Y3** |  |  |  |
| **Vocabulary:** | add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds | **Manipulatives & scaffolds:** | Ten frames  Double sided counters  Numicon  Cubes  Base 10/Dienes  Part-whole model  Bar model  Number line  Place value charts  Place value counters |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Apply number bonds | 2 + 3 = 5 20 + 30 = 50 | A picture containing screenshot, line, rectangle, text  Description automatically generated\_\_ + 2 = 8  \_\_ + 20 = 80 | 2 + \_\_ = 5  20 + \_\_ = 50 |
| Add ones | A picture containing screenshot, text, rectangle, line  Description automatically generated  243 + 5 = | A blue marker on a white surface  Description automatically generated  222 + 4 = | 354 + 4  215 + 3  461 + 8 |
| Add tens | A picture containing screenshot, text, rectangle, line  Description automatically generated  243 + 20 = | A blue marker on a white surface  Description automatically generated  226 + 30 = | 546 + 30  743 + 50  229 + 60 |
| Add hundreds | A picture containing screenshot, text, rectangle, line  Description automatically generated  243 + 200 = | A white paper with blue writing  Description automatically generated  256 + 300 = | 378 + 400  579 + 300  285 + 600 |
| Add 1s across a ten | A picture containing screenshot, text, rectangle, line  Description automatically generated  243 + 9 =  243 + 7 = 250 + 2 =  252 | 248 + 6 =  248 + 2 = 250 + 4 =  254 | 248 + 9 |
| Add 10s across a hundred | 60 + 50 =  60 + 40 = 100  100 + 10 = 110 | 350 + 80 =  350 + 50 = 400 + 30 = 430 | 695 + 80  476 + 60 |
| Add two numbers (no exchange) |  | A white board with blue writing on it  Description automatically generated |  |
| Add two numbers (across a ten) | A picture containing text, diagram, line, screenshot  Description automatically generated |  |  |
| Add two numbers (across a hundred) |  |  |  |
| Add 2-digit and 3-digit numbers |  |  | 537 + 82 = |
| **Y4** |  |  |  |
| **Vocabulary:** | add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands | **Manipulatives & scaffolds:** | Ten frames  Double sided counters  Numicon  Cubes  Base 10/Dienes  Part-whole model  Bar model  Number line  Place value charts  Place value counters |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Add up to two 4-digit numbers – no exchange | A picture containing screenshot, text, diagram, square  Description automatically generated | A white sheet with writing on it  Description automatically generated |  |
| Add two 4-digit numbers – one exchange |  | A whiteboard with blue writing on it  Description automatically generated 2458  + 3424 |  |
| Add two 4-digit numbers – more than one exchange |  | A white board with writing on it  Description automatically generated 2634  + 4517 |  |
| **Y5** |  |  |  |
| **Vocabulary:** | add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands, decimals, tenths, hundredths, thousandths, decimal point | **Manipulatives & scaffolds:** | Ten frames  Double sided counters  Numicon  Cubes  Base 10/Dienes  Part-whole model  Bar model  Number line  Place value charts  Place value counters |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Add whole numbers with more than four digits | A picture containing screenshot, diagram, colorfulness  Description automatically generated | A white board with red arrows and numbers  Description automatically generated  26509  + 44643 | A picture containing line, number, font  Description automatically generated |
| Add decimals across one | 0.7 + 0.5 | 0.45 + 0.67  A picture containing text, screenshot, font, diagram  Description automatically generated | 0.74 + 0.42 |
| Add decimals with the same number of decimal places | A picture containing text, screenshot, font, number  Description automatically generated | 2.62  + 2.41  **­\_\_\_\_\_** |  |
| Add decimals with a different number of decimal places |  | A white paper with black writing on it  Description automatically generated6.2  + 3.79 |  |
| **Y6** |  |  |  |
| **Vocabulary:** | add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands, decimals, tenths, hundredths, thousandths, decimal point, integer | **Manipulatives & scaffolds:** | Ten frames  Double sided counters  Numicon  Cubes  Base 10/Dienes  Part-whole model  Bar model  Number line  Place value charts  Place value counters |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Add integers | A picture containing screenshot, diagram, colorfulness  Description automatically generated | A drawing of numbers and letters  Description automatically generated260867  + 163747 |  |
| Add decimals | A picture containing text, screenshot, diagram, font  Description automatically generated | 1.73 + 21.69 = |  |

