Calculation Policy

Division

2024

**Division:**

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| **EYFS:** |  |  |  |
| **Vocabulary:** | Fair  Not fair  Share  Share equally  Groups  Equal groups of  Divide  Odd  Even | **Manipulatives & scaffolds:** | Cubes  Counters  Plates  Pots  Real life objects such as cookies, strawberries, snack items |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Explore sharing | Sharing involves dividing a set equally between a certain number of groups.  Expose children to the concept of sharing into groups and begin to identify when these groups are equal.  Is it fair?  How do you know?  Are the groups equal?  Do all the groups have the same amount?  How can we share the strawberries equally?  What if we used 3 plates? |  | It is fair because \_\_\_  It is not fair because \_\_\_  The \_\_\_ have/have not been shared equally |
| Sharing | Share practically by having a number of objects to share between various people or groups by taking one object at a time and giving it to one child before taking the next object and giving it to the next child. Repeat this process until all the objects are gone or each child has an equal amount.  Explore what happens if an amount cannot be shared equally by the number of children that we have. |  | The \_\_\_ have/have not been shared equally.  There are \_\_\_ altogether  They are shared equally between \_\_\_ groups |
| Explore grouping | Grouping involves dividing a set by placing a certain number of items in each group.  I have 12 pencils. I need 3 in each pot. How many pots will I need? |  | The groups are equal/not equal because \_\_\_  There are \_\_\_ groups of \_\_\_  There are \_\_\_ altogether |
| Grouping | Children will group for a purpose and divide a set of objects by placing a certain number of them in each group.    There are 12 cubes.  Divide the cubes into groups of 2.  How many groups are there? |  | There are \_\_\_ altogether.  The \_\_\_ can be put into equal groups of \_\_\_  There are \_\_\_ groups of \_\_\_ |
| Even and odd sharing | Children identify whether a number is odd or even by sharing into two groups. Using language such as ‘odd’, ‘even’, ‘equal’ and ‘unequal’ will prompt children to make the links to the number of objects they are sharing. |  | There are \_\_\_ altogether.  I have an odd/even number of \_\_\_  I know because \_\_\_ |
| **Y1** |  |  |  |
| **Vocabulary:** | Odd  Even  Halve  Share  Share equally  Equal groups of  Divide  Divided by  Left over | **Manipulatives & scaffolds:** | Cubes  Counters |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Make equal groups – grouping |  |  |  |
| Make equal groups – sharing |  |  | \_\_ are shared equally into \_\_ groups.  There are \_\_ in each group. |
| **Y2** |  |  |  |
| **Vocabulary:** | Odd  Even  Halve  Share  Share equally  Equal groups of  Divide  Divided by  Left over  ÷ | **Manipulatives & scaffolds:** | Counters  Number line  Bar models  Part whole models |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Make equal groups – grouping |  |  | 15 ÷ 5 = |
| Make equal groups – sharing |  |  | **­­\_\_ ÷ ­­ \_\_ = \_\_** |
| **Y3** |  |  |  |
| **Vocabulary:** | Odd  Even  Halve  Share  Share equally  Equal groups of  Divide  Divided by  Left over  ÷  Remainders  2-digit number  Partitioning  Flexible partitioning | **Manipulatives & scaffolds:** | Counters  Lolly sticks  Bar models  Part whole models  Place value counters  Place value charts |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Sharing and grouping |  |  | 27 ÷ 3 = |
| Divide a 2-digit number by a 1-digit number - no exchange |  |  | 48 ÷ 4 = |
| Divide a 2-digit number by a 1-digit number - flexible partitioning |  |  | 96 ÷ 6 = |
| Divide a 2-digit number by a 1-digit number - with remainders |  | 53 ÷ 4 = | 38 ÷ 3 = 12 r 2 |
| **Y4** |  |  |  |
| **Vocabulary:** | Odd  Even  Halve  Share  Share equally  Equal groups of  Divide  Divided by  Left over  ÷  Remainders  2-digit number  Partitioning  Flexible partitioning | **Manipulatives & scaffolds:** | Part whole models  Place value counters  Place value charts |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Divide a 2-digit number by a 1-digit number (no remainders) |  | 84 ÷ 4 =  96 ÷ 4 = | 78 ÷ 6 = |
| Divide a 2-digit number by a 1-digit number (with remainders) |  |  | 53 ÷ 4 = |
| Divide a 3-digit number by a 1-digit number | 639 ÷ 3 =    435 ÷ 3 = |  | 428 ÷ 2 = |
| **Y5** |  |  |  |
| **Vocabulary:** | Odd  Even  Halve  Share  Share equally  Equal groups of  Divide  Divided by  Left over  ÷  Remainders  Partitioning  Flexible partitioning  2/3/4-digit number  Short division | **Manipulatives & scaffolds:** | Place value counters  Place value charts  ‘Bus stop’ |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Short division | We are dividing by 3.  There is 1 group of 3 tens.  There are 3 groups of 3 ones.  39 ÷ 3 = 10 and 3  = 13 | 96 ÷ 3 = |  |
| Divide a 4-digit number by a 1-digit number |  |  |  |
| Divide with remainders |  |  |  |
| **Y6** |  |  |  |
| **Vocabulary:** | Odd  Even  Halve  Share  Share equally  Equal groups of  Divide  Divided by  Left over  ÷  Remainders  2/3/4-digit number  Partitioning  Flexible partitioning  Short division  Factors  Long division | **Manipulatives & scaffolds:** | Place value counters  Place value charts  ‘Bus stop’ |
|  |  |  |  |
| **Small step:** | **Concrete:** | **Pictorial:** | **Abstract:** |
| Short division |  |  |  |
| Division using factors |  |  |  |
| Long division | When children begin to divide larger numbers, written methods become more efficient; concrete and pictorial methods are less effective |  |  |
| Long division with remainders |  |  |  |

