Catholic Education Trust

## Multiplication

\& Division

## Progression



## Multiplication \& Division: Recall/Use

| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | - recall and use multiplicatio n and division facts for the 2,5 and 10 multiplicatio n tables, including recognising odd and even numbers <br> - show that multiplicati on of two numbers can be done in any order (commutati ve) and division of one number by another cannot | - recall and use multiplicatio n and division facts for the 3, 4 and 8 multiplicatio n tables | - recall multiplicatio n and division facts for multiplicatio n tables up to $12 \times 12$ <br> use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers <br> - recognise and use factor pairs and commutativi ty in mental calculations | - identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers <br> - know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers <br> - establish whether a number up to 100 is prime and recall prime numbers up to 19 | - identify common factors, common multiples and prime numbers <br> - use estimation to check answers to calculation $s$ and determine, in the context of a problem, an appropriate degree of accuracy |


|  |  |  |  |  | recognise <br> and use <br> square <br> numbers <br> and cube <br> numbers, <br> and the <br> notation for <br> squared (2) <br> and cubed <br> (3) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## Multiplication \& Division: Calculations

| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | - calculate mathematic al statements for multiplicatio n and division within the multiplicatio n tables and write them using the multiplicatio $\mathrm{n}(\times)$, division ( $\div$ ) and equals (=) signs | - write and calculate mathematic al statements for multiplicatio n and division using the multiplicatio n tables that they know, including for two-digit numbers times onedigit numbers, using mental and progressing to formal written methods | - multiply two-digit and threedigit numbers by a one-digit number using formal written layout | - multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplicatio n for twodigit numbers multiply and divide numbers mentally drawing upon known facts <br> - divide numbers up to 4 digits by a onedigit number using the formal written | - multiply multi-digit numbers up to 4 digits by a twodigit whole number using the formal written method of long multiplicati on <br> - divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or |



## Multiplication \& Division: Problems

| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - solve onestep problems involving multiplicatio n and division, by calculating the answer using concrete objects, pictorial representati ons and arrays with the support of the teacher | - solve problems involving multiplicatio n and division, using materials, arrays, repeated addition, mental methods, and multiplicatio n and division facts, including problems in contexts | - solve problems, including missing number problems, involving multiplicatio n and division, including positive integer scaling problems and correspond ence problems in which n objects are connected to m objects | - solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspond ence problems such as $n$ objects are connected to $m$ objects | - solve problems involving multiplicatio n and division including using their knowledge of factors and multiples, squares and cubes <br> - solve problems involving multiplicatio n and division, including scaling by simple fractions and problems involving simple rates | - solve problems involving addition, subtraction, multiplicatio n and division |
|  | Summer 1 | Spring 2 | Spring 1 | Spring 1 | Autumn 3 Spring 1 | Autumn 2 |

## Multiplication \& Division: Combined

| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | - solve problems involving addition, subtraction, multiplicatio n and division and a combination of these, including understandi ng the meaning of the equals sign | - use their knowledge of the order of operations to carry out calculation s involving the four operations |
|  |  |  |  |  | Spring 1 | Autumn 2 |

