Year 5

Autumn Term 1

Ensure familiarity with the CMF table saying the smaller factor first; know products that are square numbers, facts where 1 is a factor and where 10 is a factor.

Recap how unitised counters and equations can represent repeated units; recap contexts where 2 is a factor.

Make links between multiplication and division equations and know how the numbers are connected.

Use a ratio table to explore a scalar relationship when multiplying by 10 and by $\frac{1}{10}$; 100 and $\frac{1}{100}$

Multiply by a unit fraction connecting this to partitive and quotitive division.

Use a ratio table to explore a constant (functional) relationship.

Spring Term

Explore contexts where you can use either a multiplication and addition equation or a division equation with a remainder.

Understand and use divisibility rules for 4, 8, 3, 6 and 9.

Continue to understand that division equations can also be written as fractions $12 \div 3 = \frac{12}{3}$ and notice the relationship between the numerator and the denominator, sorting and classifying improper fractions into those that give a whole number quotient and those that do not.

Recap facts in the 7 times table.

Summer Term

Explore multiplicative composition including contexts that give rise to more than 2 factors.

Explore the associative and commutative property of multiplication to make calculations more accessible.

Consider what changes when you shift from one expression to another for example 3×72 to 3×73, and 3×72 to 4×72, being able to explain what each number represents.

Apply scaling by, 10, 100, $\frac{1}{10}$ or $\frac{1}{100}$ to known facts.

Year 4

Autumn Term 1

Represent 'many as 1' using a unitised counter and a 'stamping' gesture

Use the 'five and a bit' structure to double, and connect this to recalling products when one of the factors is 2 or 4

Practise recalling products when one of the factors is 5 or 10

Explore 'square' facts

Use the distributive property to explore the x9, x11 and x12 facts

Become familiar with the core multiplication facts (CMF) table and practise saying the smaller factor first regardless of the position of the factors

Spring Term

Going For Gold

The intention is that, over the course of this term, pupils will develop automaticity in all the multiplication facts, both those in the Core Multiplication Fact table (CMF) and others within the set of 144 facts.

'**Recap**': quick review of previously learnt facts using the oral pattern as the initial prompt.

'**Understand**': this provides an opportunity for pupils to explore, in more depth, the structure of the 2 focus facts.

'**Explain**': Continue to develop and use good number sense to check answers, e.g. explaining why 7 × 9 gives a product that is less than 70 and must be an odd number because at least one of the factors is odd.

'**Say**': this provides an opportunity for pupils to practise saying the fact using the oral pattern of factor, factor, product, alongside the representations used.

Summer Term

Connect contexts to writing and interpreting equations and connect multiplication equations and multiplication equations with a missing factor to division.

Know that the product in a multiplication equation is equivalent to the dividend in the corresponding division equation.