R2P: Check 4NF-4, Check 4NF-2, Check 4NF-3, 5NF-1, 5MD-1, 5MD-3, 5MD-4

NC:
Multiply and divide numbers mentally drawing upon known facts, including scaling
Multiply up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers.
Divide numbers up to 4 digits by a 1 digit number using the formal written method of short division and interpret the remainders appropriately
Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding of the equals sign.

## Concept Sequence

Multiply 4 digit numbers by a 1 digit number - use concrete manipulatives first. Focus on use of 0 as a place holder. Start without exchange.

Written x method with exchange - initially one exchange and build up.

Solve problems with multiplication - include measures.
Short Division - introduction. Show alongside familiar models.
Start with 2d by 1d and 3d by 1d.
Divide 4 digits by 1 digit (short division) - use place value counters to partition and group before written method. Build up exchange.

Short Division with remainders - Not represented as a fraction, how as r2 for example (ignore context initially).

Efficient Division - consider most appropriate methods.

Division with meausres.
Solve problems using multiplication and division.

## Planning Links

White Rose, Power Maths, Maths No Problem/Aspire
White Rose Scheme of Work:
https://assets.whiterosemaths.com/new-
schemes/Year\%205\%20Spring\%20Block\%201\%20SOL\%20Multiplic ation\%20and\%20division\%20B.pdf
NCETM Teacher Guide and Representations:
https://www.ncetm.org.uk/teaching-for-mastery/mastery-
materials/primary-mastery-professional-
development/multiplication-and-division/

Focus: Written methods for multiplication and division

Time: 2 weeks

## Times Tables 4NF-1, 5NF-1

Consolidate and practice all multiplication and division facts to $12 \times 12$ - any order, missing numbers, fractions.

Use multiplication and division facts to derive associated facts.

Develop multiplicative reasoning - links between multiplication, division and fractions.

## Resources

Counting Stick, Place Value Counters/Grid Gordons Maths Games, Mathletics, TTRockstars
BBC Super Movers
https://www.bbc.co.uk/teach/supermovers/k s2-collection/zr4ky9q


## Vocabulary

Place Value/holder
Ones, Tens..... Hundred Thousands
Multiplication, multiply, multiplied by
Multiple, factor
Groups of, times, product
Once, twice...ten times
Repeated addition, Short Division
Division, dividing, divide, divided by, divided into
Left, left over, remainder
Grouping, sharing, share, share equally
Group in....., equal groups of, halving
Array, row, column
Number patterns, Multiplication table
Multiplication fact, division fact
Inverse

