## Focus

Multiplication and Division

Time
4 weeks


R2P: 4NF-1, 4NF-2, 4NF-3, 4MD-1, 4MD-2, 4MD-3
NC:
Count from 0 in multiples of 6, 7, 9, 25 and 1000.
Recall and use multiplication and division facts for multiplication tables to $12 \times 12$.
Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two digit numbers times one digit numbers using mental and progressing to formal written methods.
Solve problems involving multiplying and adding, including using the distributive law to multiply 2 digit numbers by one digit, integer scaling problems and harder correspondence problems such as an objects connected to m objects.

## Concept Sequence

Recap $2 \mathrm{x} / 5 \mathrm{x} / 10 \mathrm{x}$ tables. Recap $2 \mathrm{x} / 4 \mathrm{x} / 8 \mathrm{x}$ tables.
Multiples of 3 and $3 x$ table. Representations.
Multiply and Divide by 6 - use equal groups in pictorial and concrete methods to solve problems. Use strategies to find unkown facts. Make links with $3 x$ and $5 x$ tables.
$6 x$ table and division facts - relate to $3 x$ table (doubling).
Multiply and Divide by 9 - relate to $3 x / a 0 x$ tables in different contexts.
$9 x$ table and division facts - link to $3 x / 10 x$ table to derive related facts.
$3 x 6 x 9 x$ tables. Mixed word problems.
Multiply and divide by 7 - count in 7s and use equal groups with concrete and pictorial methods to solve problems. Explore partition, commutativity and inverse relationships.
$7 x$ table and division facts - explore link sbetween tables and investigate how this supports mental strategies.

11x table and division facts. Link with $10 x$ table. Children already know most of these - show links with commutativity.
$12 x$ table and division facts. Link with $10 x$ and $2 x$ tables. Know it is double $6 x$ /double double $3 x$.

Multiply by 1 and 0 - use concrete equipment and pictorial representations.

Divide by 1 - Use concrete and pictorial representations.
Demonstrate sharing and grouping using stem sentences.
$9 x$ table - multiples, missing numbers, division, fractions Count in 7s

## Resources

Objects (counters, cubes), place value chart
100 Square, Number Lines, Counting stick Gordons Maths Games, Mathletics, TTRockstars BBC Super Movers
https://www.bbc.co.uk/teach/supermovers/ks2collection/zr4ky9q
Working Wall - stem sentences

## Planning Links

White Rose, Power Maths, Maths No Problem Text Books, Aspire Maths
White Rose Scheme of Work:
https://assets.whiterosemaths.com/newschemes/Y4\ Autumn\ Block\ 4\ SOL\ 
Multiplication\%20and\%20division\%20A.pdf
NCETM Teacher Guide and Representations:
https://www.ncetm.org.uk/classroom-
resources/primm-2-13-calculation-multiplying-and-dividing-by-10-or-100/
https://www.ncetm.org.uk/classroom-
resources/primm-2-08-times-tables-3-6-and-9-and-the-relationship-between-them/
https://www.ncetm.org.uk/classroom-resources/primm-2-11-times-tables-11-and-12/

## Vocabulary

Multiplication, Multiply, Multiplied by, Multiple, Product, Times
Division, Dividing, Grouping, Sharing, Equal groups of Group in tens, hundreds, sixes, sevens, nines
$X$, I like it so much I want $X$ times Doubling, Halving, Number patterns Once, twice, three.... times
Repeated addition, Array, row, column Multiplication table, Multiplication fact, Inverse

