



Mathematics Medium Term Plan

Year 3 Spring Term Unit 2 Multiplication and Division

Focus

Multiplication and Division

Time

3 weeks

Times Tables 3NF-2

Recap 3x 4x; Count in 8s

R2P- 3MD-1, 3NF-3

NC:

Recall and use multiplication and division facts for the 3, 4 and 8x tables.

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, including missing number problems, including multiplication and division, including positive integer scaling problems and correspondence problems which n objects are connected to m objects.

Concept Sequence

Multiples of 10.

Related Calculations – use known facts to solve other problems, eg. if one number in the calculation is ten times bigger, then the answer will be tens times bigger eg. if $3 \times 4 = 12$ so $3 \times 40 = 120$. Develop conceptual understanding through concrete manipulatives.

Reasoning about multiplication – Comparing Statements – compare statements using inequality symbols. Use variety of representations of multiplication and division eg. arrays and repeated addition.

Multiply 2 digits by 1 digit – use repeated addition with concrete manipulatives first before using formal methods alongside. Apply partitioning to represent and solve calculations. No exchange.

Multiply 2 digits by 1 digit – with exchange.

Link Multiplication and Division – Explore calculations multiplied by 10 eg. $8 \div 2 = 4$ so $80 \div 2 = 40$.

Divide 2 digits by 1 digit – use partitioning into tens and ones and sharing. Divide tens first then ones. First with no exchange.

Divide 2 digit numbers by 1 digit – flexible partitioning.

Divide 2 digits by 1 digit – solving problems with a remainder (eg. r3). Links made with division and repeated subtraction.

Scaling – use term ‘times as many’. Bar models to visualise concept. Use examples and non-examples.

How many ways – work systematically to find possible combinations from two groups of objects. Use practical equipment. Use multiplication to calculate possible combinations without listing.

Planning Links

Maths No Problem Text Books, Aspire Maths

White Rose Scheme of Work:

<https://assets.whiterosemaths.com/new-schemes/Year%203%20Spring%20Block%201%20SOL%20Multiplication%20and%20division%20B.pdf>

Teacher Guide and Representations:

<https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/multiplication-and-division/>

Existing Vocabulary

Multiplication, Multiply, Multiplied by Multiple

Product, Times

Division, Dividing, Grouping, Sharing

Equal groups of

Group in pairs, fives...

Array

X, I like it so much I want X times

Doubling, Halving

Number patterns Groups of

Once, twice, three.... times

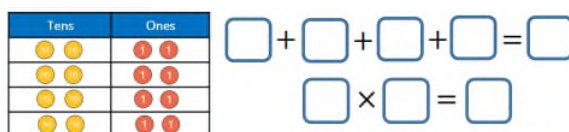
Repeated addition

Array, row, column

Multiplication table, Multiplication fact

New Vocabulary

Remainder, Factor



Resources

Objects (counters, cubes), 100 Square, Number Lines, Counting stick, Working Wall – stem sentences

Gordons Maths Games, Mathletics, TTRockstars

BBC Super Movers <https://www.bbc.co.uk/teach/supermovers/ks2-maths-collection/z7frpg8>