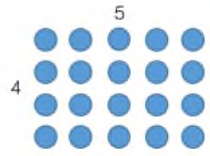

Crosby Primary School

Mathematics Medium Term Plan

Year 5 Autumn Term Unit 3 Multiplication and Division

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

NC:

Recognise and use square numbers and cube numbers and the notation for squared (²) and cubed (³).

Multiply and Divide numbers mentally drawing upon known facts.

Identify factors, including all factor pairs of a number, and common factors of two numbers.

Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.

Establish whether a number up to 100 is prime and recall prime numbers up to 19.

Focus: Multiples and Factors

Time: 1 week

Resources

Counting Stick, PV Charts, Gattengo
Gordons Maths Games, Mathletics, TTRockstars
BBC Super Movers
https://www.bbc.co.uk/teach/supermovers/ks2-collection/zr4ky9q

Concept Sequence

Multiples - using concrete and pictorial representations. A multiple is the product of the number and another whole number.

Common multiples.

Factors – focus on relationship with multiplication and division using arrays. Factors of a number multiply together to give that number, meaning that factors come in pairs (factor x factor=product).

Common factors of 2 numbers – use arrays to compare factors of a number and use Venn diagrams to show results.

Prime numbers – some numbers only have two factors. Non-primes are called composite numbers. Recall prime numbers to 19. Establish whether a number is prime to 100. 1 is not a prime number because it only has one factor.

Square numbers – have an odd number of factors and are the result of multiplying a whole number by itself. Use correct notation.

Cube numbers – the result of multiplying a whole number by itself three times. Use correct notation.

Multiply by 10, 100, 1000 – Whole numbers.Place Value Charts, Gattengo charts.

Divide by 10, 100, 1000 – Whole numbers. Place Value Charts, Gattengo charts.

Multiples of 10, 100, 1000 – Whole numbers. Multiply and divide.

Times Tables 4NF-1, 5NF-1

Consolidate and practice all multiplication and division facts to 12x12 – any order, missing numbers, fractions.

Use multiplication and division facts to derive associated facts.

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

1	36
2	18
3	12
4	9
5	X
6	6

Vocabulary

Multiplication, multiply, multiplied by
Multiple, factor
Groups of, times, product
Once, twice…ten times
Repeated addition
Division, dividing, divide, divided by, divided into
Left, left over, remainder
Grouping, sharing, share, share equally
Group in pairs….tens
Equal groups of, halving
Array, row, column
Number patterns
Multiplication table
Multiplication fact, division fact
Inverse Odd/even numbers

New Vocabulary

Prime, Square, Cube number
Prime factor, Non-prime number
Composite number

Planning Links

White Rose/Power Maths, Maths No Problem/Aspire Maths
White Rose Scheme of Work:
https://assets.whiterosemaths.com/new-schemes/Y5%20Autumn%20Block%203%20SOL%20Multiplication%20and%20division%20A.pdf
NCETM Teacher Guide and Representations:
https://www.ncetm.org.uk/classroom-resources/primm-2-21-factors-multiples-prime-numbers-and-composite-numbers/