Crosby Primary School

Mathematics Medium Term Plan

Year 5 Autumn Term Unit 1 Place Value

R2P: Check 4NPV-1, Check 4NPV-2, Check 4NPV-3, Check 4NPV-4, 5NPV-1, 5NPV-2

NC:

Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.

Count forwards or backwards in steps of 10 for any given number to 1,000,000.

Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.

Solve number problems and practical problems that involve the above.

Focus: Number/Place Value

Time: 3 weeks

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.

Concept Sequence

Numbers to 10,000. Representation of digits – use concrete manipulatives and pictorial representations. Recap adding/subtracting 10, 100, 1000.

Numbers to 100,000. Introduce ten thousand column. Multiples of 10,000. Use place value grid and number lines. Number line – find numbers between two points.

Numbers to 1,000,000 – Representations. Begin to Partition.

Read/write numbers to 1,000,000. Use commas. Place Value chart/part-whole models.

Powers of 10. Relationships between columns (not calculations). Place Value and Gattengo charts.

10/100/1000/10,000/100,000 more/less – count forwards and backwards. Gattengo charts.

Partition numbers to 1,000,000. Expanded number sentences. Flexible partition.

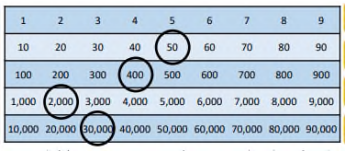
Number line to 1,000,000. Different intervals. Midpoints. Preparation for rounding.

Compare/order to 100,000 - representing numbers in different ways – number lines, counters, part-whole models.

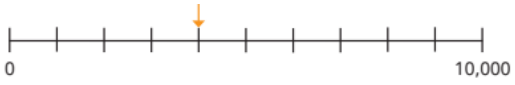
Compare/order to 1,000,000.

Round to nearest 10, 100, 1000. Use rounding to the nearest… rather than rounding up/down. Look at rounding for a purpose, including contexts where you round up but wouldn't expect to (like remainders in division) eg. 53 items in boxes of 10 – need 6 books. Complete answers in table form. Use number lines to help visualise which multiple is nearer. Remind convention of rounding up when numbers are exactly half way.

Round within 1,000,000. Look at what power to round to for approximations.



1	2	3	4	5	6	7	8	9
10	20	30	40	50	60	70	80	90
100	200	300	400	500	600	700	800	900
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000



Existing Vocabulary

Number, integer, numeral, none, Zero, One, two, three….one million
How many…?
Count, count to/up to, count on, count on from, count on to, count back, count back from, count back to
Forwards/Backwards
Count in multiples of….. (include 25, 50, 100, 1000)
Equal to, Equivalent to, Is the same as
More, less, Most, least, many, tally
Multiple of
Sequence, continue, predict, Odd, even
Few, pattern, pair, rule
Ones, tens, hundreds, digit
One/two/three-digit number
Place, place value, Stands for, represents, exchange
The same number as, as many as
More, larger, bigger, greater
Greater than/less than
Fewer, smaller, less, fewest, smallest, least
Most, biggest, largest, greatest
One more/less, ten more/less, hundred more/less, thousand more/less
Compare, size, order
First, second…..
Last, last but one, next, between, half-way between, above, below
Round to nearest, Half way

New Vocabulary

Factor pairs, divisible
Ascending order, descending order
Hundred thousands, million
Ten thousand more/less, Hundred thousand more/less

Resources

Place value counters, place value counters, place value grids/Gattengo charts, Number Lines, Counting stick
Gordons Maths Games, Mathletics, TTRockstars
BBC Super Movers
https://www.bbc.co.uk/teach/supermovers/ks2-collection/zr4ky9q

Planning Links

Power Maths, White Rose, Maths No Problem/Aspire Maths
White Rose Scheme of Work:
https://assets.whiterosemaths.com/new-schemes/Y5%20Autumn%20Block%201%20SOL%20Place%20value.pdf
NCETM:
https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/number-addition-and-subtraction/