Medium Term Maths – Autumn 1 – Year 5

Counting
Weekly times table counting
Counting in tens, hundreds, thousands and ten thousands for rounding

Number and Place value
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 powers of 10 for any given number up 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 [reading, writing, comparing and ordering numbers up to 1,000,000]
Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.

Calculation
Add and subtract whole numbers with more than 4 digits using a formal column method.
Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
Use inverse operations
Solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.

Hook for learning:
Links to history and science learning challenges

Learning Challenge links
Plot dates accurately on a timeline using 4-digit numbers.

Multiplication and division
Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
Solve problems involving multiplication and division including using their 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.
Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).
Solve problems involving multiplication and division, including scaling by simple fractions and problems

Non-negotiables:
Read, write, order and compare numbers to at least 100,000 and determine the value of each digit.
Round any number up to 100,000 to the nearest 10,000, 1000, 100 or 10.
Add and subtract whole numbers with more than 4 digits using a formal column method.

Meeting Expectations
Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
Solve number and practical problems with numbers up to 1,000,000
Solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.

Exceeding Expectation
Ask children to create inverse puzzles for each other, working out a starting number from a final number and a series of steps.

Compare calculations laid out correctly and incorrectly. What is the difference between the correct and incorrect answer? Why?

Maths –Weekly – Year 5

Week 1: Number Place Value within 100,000

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 powers of 10 for any given number up 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 [reading, writing, comparing and ordering numbers up to 1,000,000]

M Round numbers within 10,000
T Round numbers within 10,000
Th Round numbers within 10,000
Fr Times tables

Week 2: Number Place Value within 100,000

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

Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.

M Round numbers within 100,000
T Round numbers within 100,000
Th Round numbers within 100,000
Fr Times tables

Week 3: Addition and Subtraction

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

M Written addition calculations 4 digits
T Written addition calculations 4 digits
Th Written subtraction calculations 4 digits
F Times tables

Week 4 Addition and Subtraction

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Add and subtract numbers mentally with increasingly large numbers.

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use

M Inverse operations
T Inverse operations
 Th Inverse operations
Fr Times tables

Week 5 Multiplication and Division

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

 Solve problems involving multiplication and division including using their 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.

M Multiples and factors
T Multiples and factors
Th Multiples and factors
Fr- Times tables

Week 6: Multiplication and Division

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

Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

M Squares and cubes
T Squares and cubes
Th Squares and cubes
Fr Roman numerals