Year 6 Maths – Autumn 1

Counting
Count on/back from a given number in steps of 10/100/1000/10000 up to at least 1,000,000
Count on/back with positive and negative numbers

Number and Place value
Read, write, partition, order and compare numbers to 10 million
Round any number to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000
Order and compare numbers including negative numbers

Calculation
Use long and short multiplication methods to multiply up to 4 digit by 2 digit
Use long and short division methods to divide up to 4 digit by 2 digit numbers
Use column addition and column subtraction methods efficiently

Fractions and decimals
Count on/back in whole numbers, fraction and decimal sequences through zero to include negative numbers (e.g. 2.5 or 1 ¼)

Meeting Expectations
I can read, write, order and compare numbers to at least 10 million and say the value of each digit.
I can round any number to a required degree of accuracy.
I can solve addition and subtraction word and practical problems.
I can multiply numbers of up to 4 digits by a 2 digit number using a formal written method.
I can divide numbers of up to 4 digits by a 2 digit number using a formal written method, showing remainders as appropriate.
I can solve problems involving addition, subtraction, multiplication and division.

Hook for learning:
Links to Learning Challenge WW2 and Science Light topic.

Learning Challenge links
Can you calculate the differences between armed and civilian deaths in different countries? Can you calculate the weight of food rations your family would have received?

Can you investigate hours of daylight in different cities?

Measurement
Solve problems involving the calculation and conversion of units of measure

Statistics
Interpret information from tables, bar graphs and line graphs

Exceeding Expectations
I can solve addition and subtraction multi-step problems, deciding which operations and methods to use and explain why they were suitable.

I can mentally calculate using a mix of the four operations.

Non-negotiables:
Compare and order numbers to a million

Round any whole number to a required degree of accuracy

Add and subtract numbers with 4 digits using column method and numbers with 2 dp

Multiply and divide numbers with 4 digits using the formal written methods of calculation

PIXL TCC objectives for recovery curriculum
Number and place value

Can order and compare numbers up to 1 000 000, Can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 or 100 000, Can solve problems using place value and number facts Can read, write and order numbers up to three dp, Can round decimals to the nearest whole number and to one or two dp, Can read, write and order whole numbers up to 10 000 000

Addition and subtraction

Can add and subtract increasingly large numbers mentally e.g. 12 462 - 2300 = 10 162, Can use rounding to check answers to addition and subtraction calculations Can solve multi-step problems involving addition and subtraction, deciding which operation and which method to use, Can use mental methods of computation for addition, Can use mental methods of computation for subtraction

Multiplication and division

Can recall and use multiplication and division facts for all the times tables, Can multiply and divide mentally using known facts, Can multiply and divide whole numbers and decimals by 10, 100 and 1000, Can multiply up to four-digit numbers by one-digit numbers using short multiplication, Can divide up to four-digit numbers by one-digit numbers using short division, Can interpret remainders in context as fractions, decimals or by rounding

Maths –Weekly

Week 2: Place value
Can read, write, order and order whole numbers up to 10 000 000

Intervention/arithmetic practice based on TCCs for recovery curriculum
Place value PIXL TCCs q1-3, 16-18

Week 3: Place Value
Can round any whole number to the nearest 10, 100, 1000 etc
Use negative numbers in context, and calculate intervals across zero.

Intervention/arithmetic practice based on TCCs for recovery curriculum
Place value PIXL TCCs q 4-15

Week 4: Four operations
Can use efficient written methods of addition including column addition
Can use efficient written methods of subtraction including column subtraction
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Intervention/arithmetic practice based on TCCs for recovery curriculum
Addition and Subtraction PIXL TCCs q1-10

Week 5: Four operations
Can use tables and place value calculations with multiples of 10
Can use efficient written methods of multiplication including short and long multiplication

Intervention/arithmetic practice based on TCCs for recovery curriculum
Addition and Subtraction PIXL TCCs q11-17

Week 6: Four operations
 Can use efficient written methods of division including short and long division with remainders
Solve multiplication and division multi-step problems in contexts, deciding which operations and methods to use and why

Intervention/arithmetic practice based on TCCs for recovery curriculum
Multiplication and Division PIXL TCCs q1-10

Week 7: Four operations
Find factors and factor pairs of each number to 100, including common factors
Can identify multiples and common multiples
Can identify prime numbers, square and cube numbers
To understand the effect of brackets on a calculation

Intervention/arithmetic practice based on TCCs for recovery curriculum
Multiplication and Division PIXL TCCs q11-13

Week 8: Statistics
Recap of different types of graphs
Links to Science and real life contexts
Read information from tables, bar graphs and line graphs to answer questions

Intervention/arithmetic practice based on TCCs for recovery curriculum
Multiplication and Division PIXL TCCs q14-18