**CURRICULUM SUMMARY – January to February 2018**

SUBJECT: Mathematics YEAR 5 TEACHER: Beata Kruk-Zabawa and Adam Miller

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| **Week** | **Dates** | **Learning objectives** | **Activities (in brief)** |
| 1 | 8 Jan | Understand place value in 6-digit numbers by creating 6-digit numbers, placing them on a number line and solving place value additions and subtractions  Order and compare 6-digit numbers and say a number between  Understand the effect of multiplying or dividing a given number by 10, 100 or 1000; answers < 100000 and with not more than 2 decimal places  Multiply and divide numbers by 10 and 100 to give 1- or 2-place decimal answers  Use place value to add and subtract 0·1 and 0·01 to and from decimal numbers  Round 1- and 2-place decimals up and down to the nearest whole number  Round 2-place decimals up or down to the nearest tenth  Use mathematical reasoning to explain findings, patterns and relationships | Read, write and order numbers with up to 6 digits and understand the place value of each digit; place 6-digit numbers on a number line and find numbers between; solve place-value additions and subtractions with 6-digit numbers; understand place value in decimal numbers as tenths and hundredths; multiply and divide by 10/100/1000 using a place-value grid; understand place value in decimal numbers to 2-decimal places; place decimal numbers on a line; round two-place decimal numbers to nearest tenth and whole number; say the number a tenth or a hundredth more. |
| 2 | 15 Jan | Use mental strategies to add 2-digit, 3-digit and digit numbers  Add any pair of 1-place decimals  Work out what number to add to a 2-place decimal to make the next whole number  Understand addition and subtraction as inverses of each other and use this to find relationships  Use counting up to subtract 4-digit numbers from near multiples of 1000  Subtract 4-digit from 4-digit multiples of 1000 by counting up  Solve addition and subtraction multi-step problems, deciding which operations and methods to use and why  Use expanded or compact decomposition to subtract numbers with up to 4-digits (harder) | Rehearse mental addition strategies for decimals and whole numbers; use counting on as a strategy to perform mental addition of 2-place decimals to the next whole number; solve missing number sentences; use mental strategies to solve multi-step word problems; use counting up as a strategy to perform written subtraction (Frog). |
| 3 | 22 Jan | Apply divisibility tests for 2, 3, 4, 5, 6, 9, 10 and 25  Identify factors and multiples, and begin to find common factors  Use mental strategies to solve multiplications including multiplying by 0 and 1, dividing by 1, multiplying together three numbers  Use mental strategies to solve divisions including dividing by 1  Use efficient mental division strategies to divide large numbers  Identify all the prime numbers less than 100 using Eratosthenes sieve  Identify square numbers up to 100, understand concept of a square root, relate square roots to square numbers  Identify patterns, devise and test rules and use them to make predictions | Use rules of divisibility to find if numbers are divisible by 2, 3, 4, 5, 9 and 10; identity prime numbers; revise finding factors of numbers; find squares and square roots of square numbers; finding patterns and making and testing rules; use mental multiplication and division strategies; relate mental division strategies to multiples of ten of the divisor. |
| 4 | 29 Jan | Devise a rule to work out missing angles  Recognise that an equilateral triangle is a regular polygon with angles of 60°  Compare and classify triangles, according to their properties  Read relevant scales to the nearest numbered unit  Measure, compare, add and subtract weights (masses) using kg/g  Convert between different units of measure, e.g. kilometres to metres, metres to centimetres, etc.  Recognise and estimate volume and capacity using ccs and ml  Interpret and present continuous data using line graphs | Know properties of equilateral, isosceles, scalene and right-angled triangles; find that angles in a triangle have a total of 180°; sort triangles according to their properties; use scales to weigh amounts to the nearest half interval; convert from grams to kilograms and vice versa, from millilitres to litres and vice versa, and from metres to kilometres and vice versa; read scales to the nearest half division; understand that we measure distance in kilometres and miles; use ready reckoning to give approximate values of miles in kilometres and vice versa; draw line conversion graphs. |
| 5 | 5 Feb | Use column addition to add pairs of 2-place decimals, including amounts of money  Use counting up on a number line to subtract 2-place decimals from 2-place decimals  Check that all solutions have been found  Solve problems involving addition, subtraction, multiplication and division and a combination of these  Solve problems involving addition and subtraction of measures using decimal notation | Use a written column method to add amounts of money in pounds and pence; add 2-place decimals using written column addition; subtract decimal numbers using counting up (Frog). |