**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 subtractionsOrder and compare 6-digit numbers and say a number betweenUnderstand the effect of multiplying or dividing a given number by 10, 100 or 1000; answers < 100000 and with not more than 2 decimal placesMultiply and divide numbers by 10 and 100 to give 1- or 2-place decimal answersUse place value to add and subtract 0·1 and 0·01 to and from decimal numbersRound 1- and 2-place decimals up and down to the nearest whole numberRound 2-place decimals up or down to the nearest tenthUse 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 numbersAdd any pair of 1-place decimalsWork out what number to add to a 2-place decimal to make the next whole numberUnderstand addition and subtraction as inverses of each other and use this to find relationshipsUse counting up to subtract 4-digit numbers from near multiples of 1000Subtract 4-digit from 4-digit multiples of 1000 by counting upSolve addition and subtraction multi-step problems, deciding which operations and methods to use and whyUse 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 25Identify factors and multiples, and begin to find common factorsUse mental strategies to solve multiplications including multiplying by 0 and 1, dividing by 1, multiplying together three numbersUse mental strategies to solve divisions including dividing by 1Use efficient mental division strategies to divide large numbersIdentify all the prime numbers less than 100 using Eratosthenes sieveIdentify square numbers up to 100, understand concept of a square root, relate square roots to square numbersIdentify 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 anglesRecognise that an equilateral triangle is a regular polygon with angles of 60°Compare and classify triangles, according to their propertiesRead relevant scales to the nearest numbered unitMeasure, compare, add and subtract weights (masses) using kg/gConvert between different units of measure, e.g. kilometres to metres, metres to centimetres, etc.Recognise and estimate volume and capacity using ccs and mlInterpret 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 moneyUse counting up on a number line to subtract 2-place decimals from 2-place decimalsCheck that all solutions have been foundSolve problems involving addition, subtraction, multiplication and division and a combination of theseSolve 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). |