Teacher: Mr Cox   **Class: 5**   **Year: 5/6**   **Term: Spring**

Week Beginning	Main Teaching		Outcomes		S.T.O.P.S Focus
	Year 5	Year 6	Year 5	Year 6	
1	Addition and place Value	Addition and Place Value	Say what each digit represents in a 6-digit number. Write place value related additions and subtractions. Compare pairs of 6-digit numbers. Add and subtract 1, 10, 100, 1000, 10,000 and 100,000 to/from 6-digit numbers.1. Place 6-digit numbers on empty number lines. Round 6-digit numbers to the nearest 100 to 1000. Use negative numbers in context of temperature. Calculate rises and falls in temperature. Find a difference between a negative temperature and positive temperature.	Say what each digit represents in a 7-digit number. Write place value related additions and subtractions. Compare pairs of 7-digit numbers. Add and subtract 1, 10, 100, 1000, 10,000, 100,000 and 1,000,000 to/from 7-digit numbers. Place 7-digit numbers on empty number lines. 2. Round 7-digit numbers to the nearest 10, 100, 1000, 10,000, 100,000 or 1,000,000. Use negative numbers in context of temperature. Calculate rises and falls in temperature. Calculate intervals across zero.	Trial by Improvement
2	Addition and Subtraction	Addition and Subtraction	Say what each digit represents in a 7-digit number. Write place value related additions and subtractions. 3. Compare pairs of 7-digit numbers. Add and subtract 1, 10, 100, 1000, 10,000, 100,000 and 1,000,000 to/from 7-digit numbers. Place 7-digit numbers on empty number lines. Round 7-digit numbers to the nearest 10, 100, 1000, 10,000, 100,000 or 1,000,000. Use negative numbers in context of temperature. Calculate rises and falls in temperature. Calculate intervals across zero.	Add and subtract near multiples of integers including decimals (e.g. +/- 2.99, 3.02). Understand that calculations are carried out in a specific order: brackets first, then multiplication and division before addition and subtraction. Use knowledge of the order of operations and brackets to carry out calculations. Use Frog to find change from £100 or £200. Use column addition to add 3 or 4 amounts of money. Solve multi-step word problems. Use brackets to record the necessary calculations	Trial by Improvement

3	Addition and Place Value	Addition and Place Value	Say what each digit represents in a number with 2 decimal places. Use place value to add and subtract. Multiply and divide by 10, 100 and 1000 to give answers with two decimal places. Round numbers with 2 decimal places to the nearest whole and tenth. Add pairs of 3-digit numbers with 1 decimal place, 2 decimal places or both. Use rounding to make an estimate. Add three 4-digit numbers with 2 decimal places. Use rounding to make an estimate.	Say what each digit represents in a number with 3 decimal places. Use place value to add and subtract. Multiply and divide by 10, 100 and 1000 to give answers with three decimal places. Round numbers with 3 decimal places to the nearest whole, tenth and hundredth. Add pairs of numbers with 3 decimal place, or 2 and 3 decimal places. Use rounding to make an estimate. Add pairs of numbers with 3 decimal places. Use rounding to make an estimate.	Trial by Improvement
4	Shape, Measures and Data	Shape, Measures and Data	Plot points in two quadrants. Draw polygons and identify the co-ordinates of their vertices. Translate polygons on a grid in one direction. Begin to predict the new co-ordinates after a translation in one direction. Reflect polygons in the y-axis. Begin to predict the new co-ordinates after a reflection in the y-axis. Draw line graphs of times tables. Revise the times tables. Draw conversion graphs and read off intermediate values. Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Plot points in four quadrants. Draw polygons and identify the co-ordinates of their vertices. Reflect polygons in the y-axis and x-axis. Begin to predict the new co-ordinates after a reflection in the y-axis or x-axis. Describe a translation. Interpret and compare pie charts. Construct pie charts, working out how big each segment needs to be in degrees. Draw conversion graphs and read off intermediate values. Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Looking for Patterns

5	Multiplication and Division	Multiplication and Division	Find the highest common factor of three 2-digit numbers. Find the lowest common multiple of at least 3 single-digit numbers. Use mental strategies to multiply two and 3-digit numbers by 5, 20, 6, 4 and 8. Use knowledge of factors and multiples in mental multiplication. Use mental strategies to divide 'friendly' numbers by 5, 20, 6, 4 and 8. Use knowledge of factors and multiples in mental multiplication. Use short multiplication to multiply 4-digit numbers by 1-digit numbers. use rounding to approximate. 3. Understand that multiplication is commutative. Use short multiplication to multiply 4-digit numbers by 1-digit numbers. Use rounding to approximate. Understand that multiplication is commutative.	Solve problems involving rate. Use mental strategies to scale up. Use mental strategies to scale down. Use tables facts and place value to multiply and divide numbers with up to 2 decimal places. Use long multiplication to multiply 3-digit and 4-digit numbers by numbers between 10 and 35. Use rounding to approximate.	**Looking for Patterns**
6	Fractions and Decimals	Fractions, Decimals and Percentages	Compare and order fractions with related denominators. Know decimal equivalents for halves, quarters, fifths, tenths and hundredths. Use mental division strategies to find unit fractions of amounts. Find non-unit fractions of amounts. Find fractions, multiply and divide to solve word problems.	Compare and order fractions with unrelated denominators. Recognise equivalent fractions, decimals and percentages. Find percentages of amounts. Use mental division strategies to find non-unit fractions of amounts. Use knowledge of factor and divisibility rules to find out which fractions of amounts will give whole number answers. Understand and find the mean of a set of values.	**Looking for Patterns**

7	Division and Fractions	Division and Fractions	Multiply unit fractions by whole numbers, writing any improper fractions as mixed numbers. Multiply non-unit fractions by whole numbers, writing any improper fractions as mixed numbers. Use short division to divide 3-digit numbers by single-digit numbers. Use short division to divide 3-digit numbers by single-digit numbers including where the first digit is less than the divisor. Use short division to divide 3-digit numbers by single-digit numbers including where the first digit is less than the divisor. Divide any remainders to give fractions.	Multiply pairs of fractions. Divide fractions by whole numbers. Multiply pairs of fractions and divide fractions by whole numbers. Use long division to divide 3-digit numbers by 2-digit numbers. Use long division to divide 3-digit numbers by 2-digit numbers. Divide any remainders to give fractions.	**Simplify**
8	Shape and Measures	Shape and Measures	Find the perimeters of rectangles and composite shapes. Work out the missing lengths of sides in order to find perimeters. Find the area of rectangles including squares by multiplying the lengths of two adjacent sides together. Estimate then count to find the area of irregular shapes. Calculate the area from scale drawings. Estimate and find the volume of shapes by making it with cm cubes. Use factors to find different cuboids with the same volume.	Find a formula to find the area of a triangle. Find a formula to find the area of a parallelogram. Recognise that shapes with the same areas can have different perimeters and vice versa. Understand and use a formula to find the volume of cuboids. Know that volume is measures in cm^3, m^3 or km^3. Find volumes of cuboids using prime factors.	**Simplify**

9	Place value and Subtraction	Place value and Subtraction	Use place value to add and subtract to/from 6-digit numbers. Compare 6-digit numbers. 2. Round 6-digit numbers to the nearest 10, 100, 1000, 10,000 and 100,000. Use decomposition to subtract pairs of 5-digit numbers. Use decomposition to subtract pairs of 5-digit numbers including where there is a zero in the first number. Use decomposition to subtract pairs of 5-digit numbers and 4-digit numbers from 5-digit numbers. Solve word problems.	Solve problems involving similar shapes where the scale factor is known. Find areas of triangles, rectangles and parallelograms. Solve problems involving similar shapes where the scale factor can be found. Use ratio to solve problems, e.g. to adapt a recipe for a different number of people. Solve problems involving fractions and ratios. Use fractions and percentages to describe proportions.	Simplify
11	Number, Decimals, Addition and Subtraction	Number, Decimals and Algebra	Multiply and divide by 10, 100 and 1000 (answers with 2 or fewer decimal places). Place numbers with two decimal places on an empty line, round to the nearest tenth or whole. Use Frog (counting up) to subtract pairs of numbers with the same number of decimal places. Use Frog (counting up) to subtract pairs of numbers with different numbers of decimal places, e.g. 3.2 – 1.78 and 5.34 – 3.7. Solve single and two-step word problems involving subtraction. Choose an appropriate strategy to solve subtraction.	Multiply and divide by 10, 100 and 1000 (answers with 3 or fewer decimal places). Identify missing functions. Understand and use simple formulae. Solve simple equations. Find pairs of numbers which satisfy pairs of equations. Continue and describe linear sequences. Work out the 10th term without working out the all the terms up to that point. Generalise the nth term. Continue and describe linear sequences. Work out the 10th term without working out the all the terms up to that point. 3. Generalise the nth term.	Working Backwards

STOW-on-the-WOLD
PRIMARY SCHOOL

heart hand mind

12	Addition, Subtraction, Multiplication and Division	Multiplication and Division	Use short multiplication to multiply 4-digit numbers (including amounts of money) by single-digit numbers. Make approximations. Use short division to divide 4-digit numbers by single-digit numbers.. Use column addition to add pairs of 5-digit numbers, three 4-digit numbers, and 4-digit numbers to 5-digit numbers. Add and subtract pairs of 5-digit numbers. Make and test predictions, generate rules. Use place value to add and subtract to and from 5-digit numbers. Add and subtract near multiples of 100, 1000 and 10,000.	Use short multiplication to multiply 4-digit numbers (including amounts of money) by single-digit numbers. Make approximations. Use short division to divide 4-digit numbers by single-digit numbers. Divide remainders to give fractions/decimals, decide whether to round up or down. Use long multiplication to multiply 3-digit numbers, then 4-digit numbers by numbers between 10 and 35. Use rounding to approximate. Use long division to divide 3-digit numbers by 2-digit numbers. Make approximations. Use long division to divide 3-digit numbers by 2-digit numbers. any remainders to give fractions.	Working Backwards
13	Revision	Revision			Algebraic
14	Assessment	Assessment			Algebraic