Year Group Mathematics Objectives - Jane Prelogauskas St Andrew's CE Primary School – August 2014

YEAR FOUR	NUMBER & NUMBER FACTS/CALCULATIONS/PLACE VALUE/COUNTING	GEOMETRY/MEASURES MONEY	STATISTICS (Data Handling)	FRACTIONS DECIMALS PERCENTAGES	ALGEBRA
Working towards	~ Find 1000 more or less than a given number ~ Count backwards through zero to include negative whole numbers. ~Recognise the place value of each digit in a four digit number. ~ Recall multiplication facts for the 6, 7, and 9 times tables. ~ Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 and dividing by 1 ~ Recognise and use factor pairs and commutativity in mental calculations. ~ Add and subtract numbers with up to 4 digits using formal written methods of columnar addition and subtraction where appropriate. ~Solve addition and subtraction two-step problems in a range of contexts. ~ Solve problems involving multiplying and adding, including the distributive law to multiply 2 digit numbers by 1 digit. .	~ Compare and classify geometric shapes, including quadrilaterals and triangles, based on properties and sizes. ~ Convert between different units of measure. Estimate, compare and calculate different measures. ~ Read, write and convert time between analogue and digital 12 and 24 hour clocks. ~ Describe positions on a 2D grid as co-ordinates in the first quadrant ~~ Convert money between pounds and pence. Estimate, compare and calculate different amounts.	~ Interpret and present discrete data using appropriate graphical methods, including bar charts.	~ Count up and down in hundredths: recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ~ Recognise and write decimal equivalents of any number of tenths or hundredths ~ Recognise and write decimal equivalents to ¼, ½, ¾	
Mainly Achieved	~ Count in multiples of 6, 7, 9, 25 and 100. ~ Order and compare numbers beyond 1000 ~ Round any number to the nearest 10 or 100. Read Roman numerals to 100 (I to C) and know that over time, the number system changed to include the concept of zero and place value. ~ Recall multiplication and division facts for the 6,7, and 9 times tables ~ Recall the multiplication facts for the 11 and 12 times tables. ~ Use place value, known and derived facts to multiply and divide mentally, including multiplying together 3 numbers. ~ Multiply 2 digit and 3 digit numbers by a 1 digit, using formal written layout. ~ Estimate and use inverse operations to check answers to a calculation problem. ~ Solve addition and subtraction two -step problems in different contexts (using a variety of methods: chunking, number line, column) ~ Solve problems involving multiplying and adding, including integer scaling problems.	~ Identify lines of symmetry in 2D shapes presented in different orientations. ~ Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. ~ Find the area of rectilinear shapes by counting squares. ~ Identify acute and obtuse angles and compare and order angles up to two right angles by size ~ Convert between different units of measure eg. hours to minutes. ~ Plot specified points and draw sides to complete a given polygon ~ Apply knowledge of converting, estimating and calculating amounts of money to a variety of problems.	~ Interpret and present continuous data using appropriate Graphical methods, including time graphs	~ Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number ~ Find the effect of dividing a one or two digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths. ~ Round decimals with one decimal place to the nearest whole number. ~	

Achieved	~ Round any number to the nearest 1000 Identify represent and estimate numbers using different representations ~ Recall multiplication and division facts for the 11 and 12 times tables. ~ Divide a 2 digit by a 1 digit number using appropriate formal written methods. ~Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. ~ Solve problems involving multiplying and adding using more challenging correspondence problems such as 'n' objects are connected to 'm' objects.	~ Complete a simple symmetric figure with respect to a specific line of symmetry. ~Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days ~ Describe movements between positions as translations of a given unit to the left/right, up/down.	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables, and other graphs.	~ Identify name and write equivalent fractions of a given fraction, including tenths and hundredths. ~ Add and subtract fractions with the same denominator. ~ Solve measure and money problems involving fractions and decimals to two places.	