**Federation of Golden Flatts and Lynnfield Primary Schools**

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| **Year 4 - Autumn** | **Year 4 -Spring** | **Year 4 - Summer** |
| **Expected Standard** |
| **Number: Place Value** | **Measures: Area** | **Measures: Money** |
| * Count in multiples of 6, 7, 9. 25 and 1000.
* Find 1000 more or less than a given number.
* Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones)
* Order and compare numbers beyond 1000
* Identify, represent and estimate numbers using different representations.
* Round any number to the nearest 10, 100 or 1000
* Solve number and practical problems that involve all of the above and with increasingly large positive numbers.
* Count backwards through zero to include negative numbers.
* Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
 | * Find the area of rectilinear shapes by counting squares.
* Estimate, compare and calculate different measures
 | * Estimate, compare and calculate different measures, including money in pounds and pence.
* Solve simple money problems.
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| **Number: Addition and Subtraction** | **Number: Fractions** | **Measures: Time** |
| * Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
* Estimate and use inverse operations to check answers to a calculation.
* Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.
 | * Recognise and show, using diagrams, families of common equivalent fractions.
* Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
* 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.
* Add and subtract fractions with the same denominator.
* Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths.
* Solve simple measure problems involving fractions.
 | * Convert between different units of measure [for example, kilometre to metre; hour to minute]
* Read, write and convert time between analogue and digital 12- and 24-hour clocks.
* Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
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| **Measures: Length and Perimeter** | **Number: Decimals** | **Statistics** |
| * Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
* Convert between different units of measure [for example, kilometre to metre]
 | * Recognise and write decimal equivalents of any number of tenths or hundredths.
 | * Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
* Solve comparison, sum and difference problems using information presented in bar charts,

pictograms, tables and other graphs. |
| **Number: Multiplication and Division** | **Number: Multiplication and Division** | **Number: Decimals** |
| * Recall and use multiplication and division facts for multiplication tables up to 12 × 12.
* Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.
 | * Recognise and use factor pairs and commutativity in mental calculations
* multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
* Solve problems including multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
 | * Compare numbers with the same number of decimal

 places up to two decimal places* recognise and write decimal equivalents of any number of tenths or hundredths
* Find the effect of dividing a one or two-digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths
* Solve simple measure problems involving fractions and decimals to two decimal places.
* Round decimals with one decimal place to the nearest whole number.
* Recognise and write decimal equivalents to 1/4 , 1/2 and ¾.
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| **Geometry: Properties of Shape** |
| * Identify acute and obtuse angles and compare and order angles up to two right angles by size.
* Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
* Identify lines of symmetry in 2-D shapes presented in different orientations.
* Complete a simple symmetric figure with respect to a specific line of symmetry.
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| **Geometry: Position and Direction** |
| * Describe positions on a 2-D grid as coordinates in the first quadrant.
* Plot specified points and draw sides to complete a given polygon.
* Describe movements between positions as translations of a given unit to the left/ right and up/ down.
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| **Greater Depth** |
| * ‘Higher score’ in standardised tests.
* Reasoning and explain using age appropriate mathematical vocabulary precisely (eg, if I know 3 x 7 = 21 I know 6 x 7 = 42 because double 3 is 6 so double 21 is 42).
* Make connections between different aspects of the curriculum (eg, can find a missing vertex of a rectangle when given the other 3 vertices).
* Independently use an efficient approach to problem solving.
* Solve problems of greater complexity, where the approach is not immediately obvious.
* Explain their thinking to others.
* Record answers clearly in a variety of ways.
* Eg, ‘Sally has 9 times more football cards as Sam. Together they have 150 cards. How many more cards does Sally have than Sam?’
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* Make connections between different aspects of the curriculum (eg, can find a missing vertex of a rectangle when given the other 3 vertices).
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* Eg, ‘Peter wrote down 2 fractions. He subtracted the smaller fraction from the larger fraction and got 1/8 as the answer. Write down 2 fractions that Peter could have subtracted. What other pairs can you find?’
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* Make connections between different aspects of the curriculum (eg, can find a missing vertex of a rectangle when given the other 3 vertices).
* Independently use an efficient approach to problem solving.
* Solve problems of greater complexity, where the approach is not immediately obvious.
* Explain their thinking to others.
* Record answers clearly in a variety of ways.
* Eg, Sid and Sam share some money. Sid gets twice as much as Sam. Tick the coins which Sam might take. Is there more than one way of sharing the coins?
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