



Subject Theme Overview

Year 6

Charlton Kings Junior School

Subject	Maths	Term	Spring
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Area	What I should already be able to do	What I will be able to do by the end of term	Key Vocabulary
Numbers & the Number System	<ul style="list-style-type: none"> Identify multiples and factors, and common factors of two numbers Know what prime numbers and prime factors are 	<ul style="list-style-type: none"> Identify common factors, common multiples and prime numbers 	<p>Multiple: $4 \times 12 = 48$ so 48 is a <i>multiple</i> of 12</p> <p>Factor: $4 \times 8 = 32$ so 8 is a <i>factor</i> of 32. 4 and 8 are a <i>factor pair</i>.</p> <p>Common factor: 4 is a <i>common factor</i> of 32 and 48</p> <p>Prime number: a number that has no factors except 1 and itself e.g. 7</p> <p>Fractions</p> <p><i>proper fraction</i> – fraction where numerator is smaller than denominator (e.g. $\frac{2}{5}$)</p> <p><i>improper fraction</i> – fraction where numerator is larger than denominator (e.g. $\frac{7}{5}$)</p> <p><i>mixed number</i> – a number with both a whole and fraction part (e.g. $1\frac{2}{5}$)</p> <p><i>equivalent fractions</i> – fractions that represent the same amount of the whole</p> <p><i>simplify</i> – convert a fraction to its equivalent with the smallest possible denominator (e.g. $\frac{4}{10}$ simplifies to $\frac{2}{5}$)</p>
Fractions, Decimals and percentages	<ul style="list-style-type: none"> Compare and order fractions whose denominators are all multiples of the same number Identify, name and write equivalent fractions Recognise and convert mixed numbers and improper fractions Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers Read and write decimal numbers as fractions Recognise the per cent symbol (%) and write a % as a fraction and as a decimal Know percentage and decimal equivalents of key fractions. 	<ul style="list-style-type: none"> Compare and order fractions, including fractions > 1 Simplify fractions and express fractions in the same denomination Add and subtract fractions with different denominators and mixed numbers Multiply simple pairs of proper fractions Divide proper fractions by whole numbers Calculate decimal equivalents for a simple fraction [e.g. $\frac{3}{8} = 0.375$] Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Calculate percentages of measures and quantities and use % for comparison 	
Measurement and Calculating Space	<ul style="list-style-type: none"> Convert between different units of metric measure (e.g. km/m; cm/m; g/kg; l/ml) by multiplying and dividing by 10, 100 and 1000. Measure and calculate the perimeter of composite rectilinear shapes Calculate the area of rectangles; estimate the area of irregular shapes 	<ul style="list-style-type: none"> Use, read, write and convert between standard units using decimal notation to up to three decimal places Recognise that shapes with the same areas can have different perimeters and vice versa 	
Shape	<ul style="list-style-type: none"> Compare and classify geometric shapes based on their properties and sizes. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles Identify angles at a point and one whole turn (total 360°); angles at a point on a straight line and $1/2$ a turn (total 180°); other multiples of 90° Draw given angles, and measure them in degrees ($^\circ$) 	<ul style="list-style-type: none"> Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles Draw 2-D shapes using given dimensions and angles Solve problems involving similar shapes using scale factors 	
Presenting Data	<ul style="list-style-type: none"> Solve comparison, sum and difference problems using information presented in a line graph 	<ul style="list-style-type: none"> Interpret and construct pie charts and line graphs Calculate and interpret the mean as an average 	
Mathematical Movement	<ul style="list-style-type: none"> Identify, describe and represent the position of a shape following a translation. 	<ul style="list-style-type: none"> Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane 	

Number facts I must know
Addition facts Within 10 and 20 e.g. $7 + 8 = 15$
Subtraction facts Within 10 and 20 e.g. $15 - 7 = 8$
Multiplication facts All times tables up to 12×12
Division facts All times tables e.g. $132 \div 11 = 12$

Models and images that will be used to support my understanding											
<p>Fractions, Decimals and Percentages</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>Fraction</td> <td>Decimal</td> <td>Percent</td> </tr> <tr> <td></td> <td style="text-align: center;">$\frac{84}{100}$</td> <td style="text-align: center;">0.84</td> <td style="text-align: center;">84%</td> </tr> </table>		Fraction	Decimal	Percent		$\frac{84}{100}$	0.84	84%	<p>Mixed Numbers / Improper Fractions</p> <div style="text-align: center;"> <p>$1\frac{3}{4}$ $\frac{7}{4}$</p> </div>	<p>Angles</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>At a point: add up to 360°</p> </div> <div style="text-align: center;"> <p>On a line: Add to 180°</p> </div> <div style="text-align: center;"> <p>Opposite angles are equal</p> </div> </div>	
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