

**Richard Avenue Primary School**  
**KS 2 SPRING Maths Overview**

**Week**

Year Group	1	2	3	4	5	6	7	8	9	10	11
<b>3</b>	<p><b>Time</b></p> <ul style="list-style-type: none"> <li>~ tell / write time from analogue clock using Roman Numerals</li> <li>~ record using 12/24hr.</li> <li>~ Convert between analogue and 12hr digital</li> <li>~ Know/ convert measures of time ( mins.in hour, days in months, year, leap year</li> <li>~ estimate / measure to nearest min.</li> <li>~ Compare / order times (sec., minutes, hours)</li> <li>~ Compare duration of events</li> <li>~ Solve related problems</li> </ul>	<p><b>Written Methods of <math>\times / \div</math></b></p> <ul style="list-style-type: none"> <li>~ multiply a 2digit number by single digit no. using an extended written method.</li> <li>~ multiply a 3digit number by single digit no. using an extended written method.</li> <li>~ Multiply 2 and 3 digit numbers with products less than 1000 using a formal written method</li> <li>~ Solve related problems including missing numbers.</li> <li>~ Divide a 2 digit no. by known tables facts using extended written method ( e.g. no. line / chunking)</li> <li>~ Divide a 2 digit no. by known tables facts using a formal method</li> <li>~ solve related problems</li> </ul>	<p><b>Fractions</b></p> <ul style="list-style-type: none"> <li>~ vocabulary of fractions</li> <li>~ understand a fraction as an equal part of a whole</li> <li>~ recognise/find/write fractions of a set of objects</li> <li>• Unit fractions</li> <li>• Non-unitary fractions</li> <li>~ Find unit fractions of whole numbers.</li> <li>~ Count up and down in tenths</li> <li>~ Understand that tenths arise when                             <ul style="list-style-type: none"> <li>• Object is cut into 10 equal pieces</li> <li>• Dividing number quantities by 10</li> </ul> </li> <li>~ Recognise/ show equivalent fractions with small denominators</li> <li>~ Connect tenths to measure / place value</li> <li>+/- fractions with same denominator within a whole.</li> <li>~ compare / order fractions where numerator equal to 1 or all have same denominator.</li> <li>~ Order fractions on a number line</li> <li>• Unit fractions</li> <li>• Non-unitary</li> <li>~ Solve related problems</li> </ul>								<p><b>Angle and Shape</b></p> <ul style="list-style-type: none"> <li>~ Vocab. of angle and shape</li> <li>~ Know an angle is a property of a shape/description of turn</li> <li>~ Recognise clockwise and anti- clockwise turns.</li> <li>~ Know/ recognise a RA as a quarter turn</li> <li>~ Know two RA make a half turn/ three make <math>\frac{3}{4}</math> turn/four make a full turn</li> <li>~ Describe movement through a maze using Ra / clock wise/anti clockwise</li> <li>~ Give/ follow multi-step directions in own environment</li> <li>~ Identify angles greater/less than a RA</li> <li>~ Name/ identify properties of 2d shapes ( symmetry, length of sides, angle of vertices</li> <li>~ Recognise parallel/ perpendicular sides on a 2d shape</li> <li>~ Identify horizontal/vertical sides on 2d shape</li> <li>~ Draw 2d shape with straight sides in cm</li> <li>~ Make 3d shapes using modelling materials</li> <li>~ Recognise 3d shapes in different orientations in the environment and describe them</li> </ul>
<b>4</b>	<p><b>Fractions</b></p> <ul style="list-style-type: none"> <li>~ vocab. Of fractions</li> <li>~ denominator = number of parts needed to make the whole.</li> <li>~ numerator = number of parts you have been given</li> <li>~ Compare/order unit fractions/ fractions with the same denominator</li> <li>~ Recognise/show, using diagrams families of common equivalent fractions</li> <li>~ Use factors/multiples to recognise equivalent fractions, simplifying when possible.</li> <li>~ Understand the relationship between non-unit fractions and multiplication/division of quantities</li> <li>~ Solve Problems                             <ul style="list-style-type: none"> <li>• Calculate quantities</li> <li>• Divide quantities</li> <li>• Include non - unitary fractions</li> </ul> </li> <li>~ Add / subtract fractions with the same denominator</li> <li>~ Solve simple measure and money problems involving fractions.</li> </ul>				<p><b>Time</b></p> <ul style="list-style-type: none"> <li>~ vocab. of time</li> <li>~ read/write/ convert from analogue and digital 12 and 24hr clocks</li> <li>~ convert from :                             <ul style="list-style-type: none"> <li>• Hours to minutes</li> <li>• Mins. to seconds</li> <li>• Years to months</li> <li>• Weeks to days</li> </ul> </li> <li>~ Solve problems involving conversion of units</li> <li>~ solve problems related to the duration of events.</li> </ul>	<p><b>Decimals</b></p> <ul style="list-style-type: none"> <li>~ vocab. of decimals</li> <li>~ know that decimals and fractions are different ways of expressing numbers and proportions.</li> <li>~ Count up / down in hundredths/ tenths</li> <li>~ Know that hundredths = whole divided into 100 parts, tenths = whole divided into 10 parts</li> <li>~ Recognise / write decimal equivalents of any number of tenths / hundredths</li> <li>~ Connect hundredths / tenths to measure</li> <li>~ Recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math>, <math>\frac{1}{10}</math>, <math>\frac{3}{10}</math>, etc.</li> <li>~ Divide 1 and 2 digit numbers by 10 / 100, identifying the value of each digit in the answer</li> <li>~ Round decimals up to 1dp to the nearest whole</li> <li>~ Compare numbers to the same number of decimal places</li> <li>~ Solve related problems</li> <li>~ Solve simple money / measure problems</li> </ul>	<p><b>Money</b></p> <ul style="list-style-type: none"> <li>~ vocab. of money</li> <li>~ estimate/compare/calculate in £ and pence</li> <li>~ Understanding of place value when recording money</li> <li>~ Solve problems</li> </ul>				
<b>5</b>	<p><b>Data</b></p> <ul style="list-style-type: none"> <li>~ vocab. Of data</li> <li>~ Interpret time graphs</li> <li>~ Solve comparison/sum/difference problems using information presented in line graphs</li> <li>~ complete information in tables, including timetables</li> <li>~ read/interpret information in tables, including timetables</li> <li>~ solve problems</li> <li>~ decide which representations are most appropriate to represent given data.</li> </ul>	<p><b>Fractions</b></p> <ul style="list-style-type: none"> <li>~ vocab. of fractions</li> <li>~ count forwards/backwards in simple fractions</li> <li>~ compare / order fractions whose denominators are all multiples of the same number.</li> <li>~ identify name / write equivalent fractions, represent visually, including <math>\frac{1}{10}</math>ths and <math>\frac{1}{100}</math>ths</li> <li>~ simplify fractions using know factors</li> <li>~ Convert mixed numbers to improper fractions and vice versa.</li> <li>~ add/subtractions with same denominator/ denominators are multiples of the same number.</li> <li>~ multiply proper fractions / mixed numbers by whole numbers supported by materials and diagrams.</li> <li>~ Extend knowledge of fractions to <math>\frac{1}{1000}</math>ths and connect to decimals and measure.</li> <li>~ find fractions of amounts where numerator is equal to 1 / greater than 1.</li> <li>~ Solve related problems.</li> </ul>			<p><b>Decimals</b></p> <ul style="list-style-type: none"> <li>~ say/read/write decimal numbers as fractions up to three decimal places.</li> <li>~ Identify the value of each digit in numbers up to three decimal places</li> <li>~ Round decimals (up to 2 dp) to the nearest whole number/ one decimal place.</li> <li>~ Compare/ order numbers up to three decimal places</li> <li>~ derive / recall sums / differences of between decimals to one decimal place mentally</li> <li>~ derive / recall doubles / halves of decimals up to one decimal place</li> <li>~ derive / recall what must be added to a one decimal place number to make the next whole number mentally/</li> <li>~ double decimals up to one decimal place.</li> <li>~ add near doubles to one decimal place</li> <li>~ add / subtract tenths to/from a one digit whole number and tenths</li> <li>~ Add/subtract decimals, mixture of whole no. and decimals, decimals with different number of decimal places</li> <li>~ Multiply / divide decimals by 10,100,1000</li> <li>~ Solve related problems</li> <li>~ Relate decimals to money and convert from £ to pence, vice versa</li> <li>~ Solve money problems involving all four operations</li> </ul>						
<b>6</b>	<p><b>Decimals</b></p> <ul style="list-style-type: none"> <li>~ vocab. Of decimals</li> <li>~ identify the value of each digit up to three decimal places</li> <li>~ <math>\times / \div</math> 10,100,1000 numbers to three decimal places</li> <li>~ Round numbers to the required degree of accuracy</li> <li>~ Derive/recall + / - for decimal numbers to one decimal place</li> <li>~ Derive what needs to be add to a number up to two decimal places to make the next whole number.</li> <li>~ add/subt. decimals to two decimal places using a formal written method.</li> <li>~ double decimals to one decimal place and find corresponding halves</li> <li>~ multiply / divide one digit numbers up to two decimal places by a whole number mentally</li> <li>~ multiply decimals up to two decimal places by whole number ( 1 / 2 digit whole numbers) using formal written methods</li> <li>~ Divide whole numbers / decimals by whole numbers rounding to appropriate degree of accuracy</li> <li>~ Solve problems using four rules of number in context of money.</li> <li>~ solve related problems</li> </ul>	<p><b>Percentages</b></p> <ul style="list-style-type: none"> <li>~ vocab. Of percentages</li> <li>~ recognise/ understand the % symbol related to wholes and fractions</li> <li>~ recall/use equivalences between fractions, decimals and %</li> <li>~ order fractions, decimals and %</li> <li>~ Calculate % of amounts</li> <li>~ Solve problems including comparisons.</li> </ul>	<p><b>Measure Length</b></p> <ul style="list-style-type: none"> <li>~ vocab. of length</li> <li>~ use/read/write/ convert between standard units of measure ( up to 3 dp)</li> <li>~ interpret a range of measuring scales to measure/ compare</li> <li>~ convert between miles / kilometres</li> <li>~ Solve problems involving conversions</li> </ul> <p><b>Perimeter/ Area/Volume</b></p> <ul style="list-style-type: none"> <li>~ identify/measure the perimeter</li> <li>~ Calculate perimeter of rectilinear shapes</li> <li>~ Recognise that shapes of same area can have different perimeter.</li> <li>~ Use formula to calculate area</li> <li>~ Calculate area of parallelograms / triangles</li> <li>~ Calculate / estimate, and compare volume of cubes and cuboids</li> </ul> <p><b>Mass</b></p> <ul style="list-style-type: none"> <li>~ vocab. of mass</li> <li>~ use/read/write/ convert between standard units of measure ( up to 3 dp)</li> <li>~ interpret a range of measuring scales to measure/ compare</li> <li>~ Solve problems involving conversions</li> </ul> <p><b>Volume and Capacity</b></p> <ul style="list-style-type: none"> <li>~ vocab. of volume and capacity</li> <li>~ use/read/write/ convert between standard units of measure ( up to 3 dp)</li> <li>~ interpret a range of measuring scales to measure/ compare</li> <li>~ Solve problems involving conversions</li> </ul>	<p><b>Algebra</b></p> <ul style="list-style-type: none"> <li>~ vocab. of algebra</li> <li>~ use simple formula</li> <li>~ generate/describe linear number sequences</li> <li>~ express missing number problems algebraically</li> <li>~ Find pairs of numbers that satisfy an equation with two unknowns</li> </ul>	<p><b>Ratio/ Proportion</b></p> <ul style="list-style-type: none"> <li>~ vocab. of R/P</li> <li>~ Recognise proportionality when the relationships between quantities are in the same ratio ( recipes)</li> <li>~ Solve problems involving the relative size of two quantities where missing values can be found using integer multiplication and division facts</li> <li>~ Solve problems involving unequal quantities</li> </ul>	<p><b>Data</b></p> <ul style="list-style-type: none"> <li>~ vocab. of data to solve problems</li> <li>~ Construct pie charts</li> <li>~ Link % / degrees to calculate angles of a pie chart</li> <li>~ Interpret pie charts</li> <li>~ Interpret line graphs to solve problems</li> <li>~ Calculate / use mean</li> <li>~ Consolidate skills in interpreting more complex tables</li> <li>~ Consolidate skills in completing timetables.</li> </ul>					

**Assessment Week**