Maths Curriculum map 2020-2021 Year 4 Fawbert and Barnard's Primary School

KIRFs (Key Instant Recall Facts)		
Autumn	Spring	Summer
• I can count in multiples of 1000 and 25 • I know multiplication and division facts for the 6 times table fluently • I can recall multiplication and division facts for the 2's,3's, 4's, 5's and 10's times table fluently	• I know multiplication and division facts for the 9 and 11 times tables • I can recognise decimal equivalents of fractions • I can recall multiplication and division facts for the 2's,3's, 4's, 5's, 6's and 10's times table fluently	• I know multiplication and division facts for the 7 and 8 times table • I can multiply and divide single-digit numbers by 10 and 100 • I can recall multiplication and division facts for the 2's,3's, 4's, 5's, 6's, 9's, 10's and 11's times table fluently

Quick overall focus curriculum map:

Strand	Number of weeks	Autumn	Spring	Summer
Place value	1	**To know numbers up to 4-digits**	**To know numbers up to 5-digits**	**Round, compare, order place value to 10,000**
Adding and subtracting	2	**Written method for adding and subtracting up to 4-digit numbers**	**Understanding the relationship between adding and subtracting**	**Strategies to check answers**
Multiplying and dividing	2	**To know times tables (up to 12 x 12) and division facts**	**To multiply a 3-digit number by a 1-digit number**	**To multiply and add solving problems**
Fractions	3	**Equivalent fractions, adding and subtracting**	**Knowing tenths and hundredths of decimals**	**Converting fractions into decimals and vice versa**
Measurements	1	**Metric conversions**	**To read and tell time on a digital and analogue clock**	**To solve area and perimeter of rectangles and squares**
Geometry	1	**Basic 2D and 3D shape.**	**Naming triangles and quadrilaterals**	**Identify different angles**
Position and direction	1	**Grids and coordinates**	**Completing a polygon and giving new coordinates**	**Translations of a polygon on a grid**
Statistics	1	**Bar charts**	**Pictograms**	**Line Graphs**
Daily Maths	daily	Time, shapes, reading tables and graphs, times tables, multiplying and dividing by powers of 10, roman numerals		

	Autumn	Spring	Summer
Number and place value (1 week)	**(PM unit 1)** **Focus 4-digit numbers** • **Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)** • Identify, represent and estimate numbers up to a thousand using different representations • Count in multiples of 6, 9, 25 and 1000 • Find 1000 more or less than a given number • Order and compare numbers beyond 1000 • Round any number to the nearest 10 or 100 • Solve number and practical problems that involve place value and rounding and with increasingly large positive numbers up to 4-digits	**(PM unit 1 and 2)** **Focus on 5-digit numbers** • **Recognise the place value of each digit in a five-digit number (ten thousands, thousands, hundreds, tens, and ones)** •Round any number to the nearest 10, 100 or 1000 • Solve number and practical problems that involve place value and rounding and with increasingly large positive numbers up to 5-digitd • Identify, represent and estimate numbers using different representations up to ten thousand. •Count in multiples of 6, 7, 9, 25 and 1000 • Find 1000 more or less than a given number • Order and compare numbers up to 10 000	**(PM unit 2 and 3)** **Focus rounding** • **Round any number to the nearest 10, 100, 1000 or 10 000** • **Solve number and practical problems that involve place value and rounding and with increasingly large positive numbers** • Find 1000 more or less than a given number • Count backwards through zero to include negative numbers • Count in multiples of 6, 7, 9, 25 and 1000 • Recognise the place value of each digit in a five-digit number (ten thousands, thousands, hundreds, tens, and ones) • Order and compare numbers up to and beyond 10 000 • Identify, represent and estimate numbers using different representations
CC	**History – dates or periods of time** **Geography- distances on maps** **Science- distances and diameters of planets, temperature – negative numbers** **History – roman numbers**		

Addition and subtraction (2 weeks)	**(PM unit 3)** **Focus on formal written method for adding and subtracting** • **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	**(PM unit 3)** **Focus understanding the relationship between adding and subtracting** • **Use inverse operations to check answers to a calculation** • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	**(PM unit 3)** **Focus using strategies to check answer is correct** • **Use both mental and written methods with increasingly large numbers to aid fluency** • **Estimate and use inverse operations to check answers to a calculation** • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
CC	**DT- Food and calories in a meal** **Science – Height of plants growth** **Geography – distance between countries, height of mountains**		

Multiplication and Division (2/3 weeks)	**(PM unit 5+7)** **Focus times tables up to 12 x 12** • **Recall 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 Multiply two-digit and three-digit numbers by a one-digit number using formal written layout • solve problems involving multiplying and adding, to multiply two-digit numbers by one digit,	**(PM unit 5+7)** **Focus on multiplying 3 digits by 1 digit using the written formal method** • **Multiply two-digit and three-digit numbers by a one-digit number using formal written layout** • recall multiplication and division facts for multiplication tables up to 12 × 12 • Recognise and use factor pairs and commutativity in mental calculations • 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 • Solve problems involving multiplying and adding, to multiply two-digit numbers by one digit,	**(PM unit 5+7)** **Focus on solving problems that involve multiplying** • **Solve problems involving multiplying and adding, to multiply three-digit numbers by one digit,** • recall 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
CC			

Fractions, percentages and decimals (3 weeks)	**(PM unit 8-10)-** **Focus on equivalent fractions, add and subtracting fractions** • **Recognise and show, using diagrams, families of common equivalent fractions** • **Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths** • **Add and subtract fractions with the same denominator** • Recognise and write decimal equivalents of any number of tenths or hundredths • Count using simple fractions forwards and backwards and represent this on a number line • Solve problems to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	**(PM unit 10-12)** **Focus tenths and hundredths** • **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** • **Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten** • Recognise and write decimal equivalents of any number of tenths or hundredths • Round decimals with one decimal place to the nearest whole number • Compare numbers with the same number of decimal places up to two decimal places • Solve simple measure and money problems involving fractions and decimals to two decimal places. • Begin to recognise and write decimal equivalents to $^1/_4$; $^1/_2$; $^3/_4$ • Count using simple fractions and decimal fractions, both forwards and backwards and represent fractions and decimals on a number line	**(PM unit 8-12)** **Focus on converting fractions into decimals** • **Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths and convert into decimals** • Recognise and write decimal equivalents of any number of tenths or hundredths • Recognise and write decimal equivalents to $^1/_4$; $^1/_2$; $^3/_4$ • Count up and down in hundredths; recognise that hundredths arise when dividing an object by a 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 • Recall the effect of dividing a one- or two-digit number by 10 and 100, • Round decimals with one decimal place to the nearest whole number • Solve simple measure and money problems involving fractions and decimals to two decimal places
CC	**DT- Fractions of foods and balanced diet**		

Measurements (1 week)	• **(PM unit 13)** **Focus on metric conversions** • **Convert between different metric units of measure** • Estimate, compare and calculate different measures, including money in pounds and pence • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. • Begin to look at solving perimeter of simple rectangles and squares • Find the area of rectilinear shapes by counting squares	• **(PM unit 12)** **Focus on time** • **Read, write and convert time between analogue and digital 12 and 24-hour clocks** • Estimate, compare and calculate different measures, including money in pounds and pence • Convert between different metric units of measure • Recall perimeter and area of simple quadrilaterals (rectangles and squares)	• **(PM unit 4 + 7)** **Focus on area and perimeter** • **Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres** • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. • Convert between different metric units of measure
CC	**Art – painting specific areas – cubism** **Geography – size of land** **Business – creating a theme park, consider where to place what.** **History – size of armies, land gained through war**		
Geometry (1 week)	**(PM unit 15)** **Focus on naming 2D and 3D shapes** • **Recall 2D and 3D shapes** • Compare and classify geometric shapes, including quadrilaterals and triangles • Identify lines of symmetry in 2-D shapes presented in different orientations	**(PM unit 15)** **Focus on triangles and quadrilaterals features** • **Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes** • Recall 2D and 3D shapes •Identify acute and obtuse angles and compare and order angles up to two right angles by size, *without using a protractor*	**(PM unit 15)** **Focus on angles** • **Identify acute and obtuse angles and compare and order angles up to two right angles by size, *without using a protractor*** • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Recall 2D and 3D shapes
CC	**DT – designing buildings, sketching and creating** **Art – Cubism** **Computing – rotation and angles**		

Position and direction (1 week)	**(PM unit 16)** **Focus on using grids and coordinates** • **Describe positions on a 2-D grid as coordinates in the first quadrant** • Plot specified points and draw sides to complete a given polygon.	**(PM unit 16)** **Focus on completing a given polygon** • **Plot specified points and draw sides to complete a given polygon.** • Describe positions on a 2-D grid as coordinates in the first quadrant • Describe movements between positions as translations of a given unit to the left/right and up/down	**(PM unit 16)** **Focus on translation of shapes** • **Describe movements between positions as translations of a given unit to the left/right and up/down** • describe positions on a 2-D grid as coordinates in the first quadrant • Plot specified points and draw sides to complete a given polygon.
CC	**Art – Cubism, sketching faces** **Geography – reading coordinates** **PE – orienteering**		
Statistics (1 week)	**(PM unit 14)** **Focus on bar charts** • **Interpret and present discrete data using appropriate graphical methods, including bar charts** • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	**(PM unit 14)** **Focus on pictograms** • **Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs** • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs	**(PM unit 14)** **Focus on line graphs** • **Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs and line graphs** • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
CC	**Science – Drawing line graphs, reading tables and various other graphs** **PSHE – creating findings of a decision, creating a bar chart to show outcome** **Day to daytime table**		