Maths Teaching Sequences Rec:

Autumn	Spring	Summer
Key Concepts: **- Place value (within 5)** **-Addition and subtraction** **-Measurement time**	**Key Concepts:** **-Addition and subtraction** **-Place value** **-Geometry**	**Key Concepts:** **-Geometry: Shape patterns** **-Addition and subtraction** **-Place value** **-Multiplication and division** **-Measurement: height, weight, length, distance capacity**
Teaching Sequences: Number and place value-Numbers to 5- One, two, three. Number and place value-Numbers to 5- Four. Number and place value-Numbers to 5- Five Addition and Subtraction – Sorting into groups. Number and place value -Comparing groups – Comparing groups of identical objects. Number and place value -Comparing groups – Comparing groups of non-identical objects. Addition and Subtraction – Change within 5 – one more. Addition and Subtraction – Change within 5 – one less. Measurement – Time – My day.	**Teaching Sequences:** Addition and subtraction – Numbers to 5 – Including zero. Addition and subtraction – Numbers to 5 – Number bonds to 5. Number and place value – Numbers to 10 – Counting to 6,7 and 8. Number and place value – Numbers to 10 – Counting to 9 and 10. Number and place value – Numbers to 10 – Comparing groups up to 10. Addition and subtraction – Addition to 10 – Combining 2 groups. Number and place value – Numbers to 10 – Number bonds to 10 using a ten frame. Number and place value – Numbers to 10 – Number bonds to 10 using a part-whole model. Geometry – Shape and space – Spatial awareness. Geometry – Shape and space – 3D shapes. Geometry – Shape and space – 2D shapes.	**Teaching Sequences:** Geometry – Exploring patterns – Making simple patterns. Geometry – Exploring patterns – Making more complex patterns. Addition and subtraction – Change – Adding more. Addition and subtraction – Change – Taking away. Number and place value Numbers to 20 – Counting to 20. Multiplication and division – Numerical patterns – Doubling. Multiplication and division – Numerical patterns – Halving and sharing. Multiplication and division – Numerical patterns – Odds and evens. Measurement – Measure – Length, height and distance. Measurement – Measure – Weight Measurement – Measure – Capacity.

Maths Teaching Sequences Y1:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Concepts: -Place Value(within 10) -Addition and subtraction (within 10)	**Key Concepts:** -Addition and subtraction (within 10) Cont. -Geometry: Properties of Shape	**Key Concepts:** -Place value (within 20) -Addition and subtraction (within 20)	**Key Concepts:** -Place value (within 50) -Measurement: Length and height -Measurement: Mass and volume	**Key Concepts:** -Multiplication and division -Fractions Geometry: Position and direction	**Key Concepts:** -Place value (within 100) -Measurement: Money -Measurement: Time
Teaching Sequences: **Place value (within 10)** **(16 lessons 5 weeks)** -To be able to sort objects -To be able to count objects **To be able to count objects from a larger group** To be able to represent objects **To be able to recognise numbers as words** To be able to count forwards -To be able to count 1 more To be able to count backwards -To be able to count 1 less **To be able to compare groups by matching** **To be able to use the words fewer, more and some correctly** **To be able to use the phrases greater than, lesser than and equal to correctly**	**Teaching Sequences:** **Addition and subtraction (within 10) Cont.** **To be able to compare number bonds (2022-2023)** **To be able to add together (2022-2023)** **To be able to add more (2022-2023)** **To be able to solve addition problems (2022-2023)** T**o be able to find a part (2022-2023)** - **To be able to break a whole into parts for subtraction (2022-2023)** **To be able to find links between addition and subtraction facts (2022-2023)** - To be able to count backwards (2022-2023)- - To be able to subtract (2022-2023)	**Teaching Sequences:** **Place value (within 20)** **8 lessons (2 weeks)** -To be able to count and write numbers up to 20 -To be able to represent numbers up to 20 -To be able to partition numbers 10 to 20 into tens and ones -To be able to count one more and one less -To be able to compare groups of objects -To be able to compare numbers -To be able to order groups of objects -To be able to order numbers **Addition and subtraction (within 20)** **(8 lessons 3 weeks)** -To be able to add by counting on -To be able to find and make number bonds up to 20	**Teaching Sequences:** **Place value (within 50)** **(9 lessons 3 weeks)** -To be able to count forwards and backwards within 50 -To be able to partition numbers up to 50 into tens and ones -To be able represent numbers up to 50 -To be able to find one more and one less than numbers up to 50 -To be able to compare objects within 50 (1) -To be able to compare numbers within 50 (2) -To compare numbers within 50 (3) -To be able to count in 2's within 50 -To be able to count in 5's within 50 **Measurement: Length and height** **(6 lessons 2 weeks)**	**Teaching Sequences:** **Multiplication and division** **(7 lessons 3 weeks)** -To be able to count in 10's -To be able to make equal groups -To be able to add equal groups -To be able to make arrays -To be able to make doubles -To be able to make equal groups by grouping -To be able to make equal groups by sharing **Fractions** **(4 lessons 2 weeks)** -To be able to use shapes and real-world objects to find a half -To be able to find half a group of objects -To be able to use shapes and real-world objects to find a quarter -To be able to find a quarter of a group of objects	**Teaching Sequences:** **Place value (within 100)** **(6 lessons 2 weeks)** -To be able to count to 100 -To be able to partition numbers up to 100 -To be able to compare numbers up to 100 (1) To be able to compare numbers up to 100 (2) -To be able to order numbers up to 100 -To be able to make one more and one less than numbers up to 100 **-Measurement: Money** **(3 lessons 1 week)** -To be able to recognize coins -To be able to recognize notes -To be able to count using coins **-Measurement: Time** **(6 lessons 2 weeks)** -To be able to use before and after to describe order and sort events

To be able to compare numbers o be able to order objects **To be able to order numbers** **To be able to use a number line** **Addition and subtraction (within 10) 22 lessons (5 weeks)** -To be able to explore using part whole models **To be able to explore using part-whole models (2022-2023)** To be able to write number sentences (2022-2023) **To be able to use addition fact families (2022-2023)** **To be able to use number bonds within 10 (2022-2023)** **To be able to use number bonds systematically (2022-2023)** - **To be able to explore number bonds to 10 (2022-2023)**	**To be able to subtract - take away (2022-2023)** - **To be able to subtract using a number line (2022-2023)** **To be able to find the difference between two numbers (2022-2023)** - **To be able to add or subtract 1 and 2 from a number (2022-2023)** - **To be able to compare statements (1) (2022-2023)** **To be able to compare statements (2) (2022-2023)** **Geometry: Properties of shape (5 lessons 1 week)** -To be able to recognize and name 3D shapes -To be able to sort 3D shapes -To be able to identify and name 2D shapes -To be able to sort 2D shapes -To be able to make patterns with 2D and 3D shapes	-To be able to add by making 10 -To be able to subtract within 20 not crossing 10 -To be able to subtract within 20 crossing 10 (1) -To be able to subtract within 20 crossing 10 (2) -To be able to explore addition and subtraction fact families for numbers within 20 -To be able to compare number sentences	**-**To be able to compare lengths and heights (1) - To be able to compare lengths and heights (2) -To be able to measure lengths using non-standard units (1) - To be able to measure lengths using non-standard units (2) -To be able to measure length using standard units (1) - To be able to measure length using standard units (2) **Measurement: Weight and volume (6 lessons 2 weeks)** **-**To be able to explore weight and mass -To be able to measure mass -To be able to compare mass -To be able to explore capacity and volume -To be able to measure capacity -To be able to compare capacity	**Geometry: Position and direction (3 lessons 1 week)** -To be able to describe turns -To be able to describe positions (1) -To be able to describe positions (2)	-To be able to use dates and days of the week -To be able to tell the time to the hour -To be able to tell the time to half the hour -To be able to write timings to seconds, minutes and hours -To be able to compare times

Maths Teaching Sequences Y2:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Concepts: - Place Value -Addition and subtraction	**Key Concepts:** -Addition and subtraction Cont. -- Geometry: Properties of shape	**Key Concepts:** -Multiplication and division Cont. -Measurement Money	**Key Concepts:** - Measurement: Length and Height -Measurement: Mass, capacity and temperature	**Key Concepts:** -Fractions **Measurement: Time** -	**Key Concepts:** -Statistics Geometry position and direction
Teaching Sequences: **Place Value** **(16 lessons 5 weeks)** - To be able to use numbers up to 20 To be able to count objects to 100 by making 10s To be able to recognise tens and ones To be able to use place value charts To be able to partition numbers into tens and ones (1) To be able to partition numbers into tens and ones (2) To be able to write numbers to 100 in words To be able to write numbers to 100 in expanded form To be able to use 10s on the number line to 100 To be able to use 10s and 1s on the number line to 100 To be able to estimate numbers on a number line	**Teaching Sequences:** **Addition and subtraction Cont.** To be able to recognise numbers bonds to 100 (tens) To be able to add and subtract 1s To be able to add making 10 - To be able to add three 1-digit numbers To be able to add to the next 10 To be able to add across a 10 To be able to subtract across a 10 To be able to subtract from a 10 To be able to subtract a 1-digit number from a 2-digit number To be able to add or subtract 10 more or less To be able to add and subtract 10s To be able to add two 2-digit numbers To be able to add and subtract (with exchange)	**Teaching Sequences:** **Measurement: Money** **(10 lessons 2 weeks)** -To be able to count money-pence -To be able to count money-pounds -To be able to count money-pounds and pence -To be able to select money -To be able to make the same amount of money -To be able to compare money -To be able to find a total amount of money -To be able to find the difference between 2 amounts of money -To be able to find change from an amount of money -To be able to solve 2-step problems involving money **Multiplication and division** **(9 lessons 5 weeks)** -To be able to identify equal groups -To be able to make equal groups	**Teaching Sequences:** **Measurement: Length and Height** **(5 lessons 2 weeks)** -To be able to measure length using cm -To be able to measure length using m -To be able to compare lengths -To be able to order lengths -To be able to calculate using length measurements **Measurement: Mass, capacity and temperature** **(7 lessons 3 weeks)** -To be able to compare mass -To be able to measure mass in grams -To be able to measure mass in kg -To be able to compare volume To be able to measure volume in ml -To be able to measure volume in litres	**Teaching Sequences:** **Fractions** **(12 lessons 3 weeks)** -To be able to make equal parts -To be able to identify a half -To be able to find half of a given amount -To be able to identify a quarter -To be able to find a quarter of a given amount -To be able to find a third -To be able to find a third of a given amount -To be able to identify and represent unit fractions -To be able to identify and represent non-unit fractions -To be able to explore the equivalence between a half and 2 quarters -To be able to find 3 quarters of a given amount -To be able to count in fractions **Measurement: Time** **(6 lessons 2 weeks)**	**Teaching Sequences:** **Statistics** **6 lessons 2 weeks** -To be able to make tally charts -To be able to draw one to one pictograms -To be able to interpret one to one pictograms -To be able to draw pictograms with symbols representing 2,5,10 -To be able to interpret pictograms with symbols representing 2,5,10 -To be able to build, draw and interpret block diagrams **Geometry position and direction** **(4 lessons 2 weeks)** -To be able to describe movement along straight lines -To be able to full and part turns -To be able to describe linear movements and turns on a grid

To be able to compare objects To be able to compare numbers To be able to order objects and numbers To be able to count in 2s, 5s and 10s To be able to count in 3s- **Addition and subtraction** **22 lessons 5 weeks** To be able to use numbers bonds to 10 To be able to use fact families - addition and subtraction bonds within 20 To be able to use related calculation facts	To be able to subtract a 2-digit number from a 2-digit number To be able to subtract a 2-digit number from a 2-digit number (with exchange) To complete mixed addition and subtraction To be able to compare number sentences To be able to solve missing number problems To be able to explore number bonds to 100 - **Properties of Shape (10 lessons 2 weeks)** To be able to identify and name 2-D and 3-D shapes To be able to count the sides of a 2-D shape To be able to count the vertices of a 2-D shape To be able to draw 2-D shapes To be able to find vertical lines of symmetry within 2-D shapes To be able to use lines of symmetry to complete 2D shapes To be able to sort 2-D shapes To be able to count faces on 3-D shapes To be able to count edges on 3-D shapes To be able to count vertices on 3-D shapes To be able to sort 3-D shapes To be able to make patterns using 2-D and 3-D shapes	-To be able to add equal groups -To be able to use the multiplication symbol **-**To be able to use pictures to support multiplication -To be able to explore multiplication facts using arrays -To be able to use the 2 times tables -To be able to use the 5-times table -To be able to use the 10 times table	**-To be able to read and measure temperature using a thermometer**	-To be able to read o'clock and half past timings -To be able to read quarter to and quarter past timings -To be able to tell the time to the nearest 5 minutes -To be able to convert between days, hours and minutes -To be able to find durations of time -To be able to compare durations of time	-To be able to make patterns with shapes

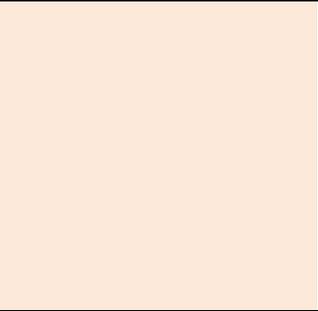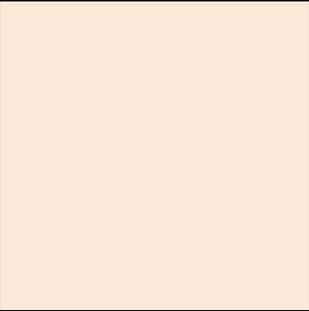|					

Maths Teaching Sequences Y3/4

Year 3   Year 4

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Concepts: -Place Value -Addition and subtraction	**Key Concepts:** -Addition and subtraction Cont. - Multiplication and division	**Key Concepts:** -Multiplication and division -Measurement: Length, perimeter and area -Fractions	**Key Concepts:** -Fractions Cont. -Measurement: Mass and Capacity -Decimals	**Key Concepts:** -Decimals including money -Measurement: Time -Statistics	**Key Concepts:** -Statistics Cont. -Geometry: Properties of shape-Position and direction
Teaching Sequences: --**Place Value** **(15 lessons 5 weeks)** -To be able to count in and represent numbers up to 100 (count in 1000's year 4) - **To be able to partition numbers to 100 (100s, 10s and 1s**) **To be able to use a number line to 100 (1,000**) **To be able to count in hundreds up to 1,000 (To be able to count in 1,000s**) **To be able to represent numbers up to 1,000 (To understand that 4-digit numbers are made up of 1,000s, 100s, 10s and 1s**) **To be able to partition numbers to 1,000 (1,000s, 100s, 10s and 1s**) **To be able to use flexible partitioning of numbers**	**Teaching Sequences:** **Addition and subtraction Cont.** **To be able to subtract a 4-digit number from a 4-digit number no exchange** **To be able to subtract a 4-digit number from a 4-digit number one exchange** **To be able to subtract a 4-digit number from a 4-digit number more than one exchange** **To be able to add and subtract multiples of 100** **To be able to subtract 1s from a 3-digit number** **To be able to subtract 10s from a 3-digit number** **To be able to choose and use efficient strategies for subtraction** **To be able to provide estimated answers** **To be able to use checking strategies**	**Teaching Sequences:** **Multiplication and division cont.** To be able to multiply and divide by 6 -To be able to become fluent in the 6 times times table -To be able to multiply and divide by 9 -To be able to become fluent in the 9 times table -To be able to multiply and divide by 7 -To be able to become fluent in the 7 times table **Measurement: Length, perimeter and area** **(11 lessons 3 weeks)** -To be able to measure length -To be able to identify equivalent lengths using metres, centimetres and millimetres -To be able to convert between metres and kilometres	**Teaching Sequences:** **Fractions Cont.** -To be able to explore fractions in different representations -To be able to use diagrams to identify equivalent fractions -To be able to use diagrams to identify equivalent fractions (2) -To be able to identify and represent fractions greater than 1 -To be able to count in fractions -To be able to add 2 or more fractions -To be able to subtract fractions -To be able to subtract fractions from whole amounts -To be able to calculate fractions of quantities -To be able to calculate quantities from a fractional amount	**Teaching Sequences:** **Decimals including money** **(9 lessons 3 weeks)** -To be able to identify coins and notes -To be able to convert between pounds and pence -To be able to add amounts of money together -To be able to subtract money -To be able to give change -To be able to use decimal notation for pounds and pence -To be able to compare and order amounts of money -To be able to round to the nearest pound to estimate amounts of money -To be able to use the 4 operations to solve money problems **Measurement: Time** **(10 lessons 2 weeks)**	**Teaching Sequences:** **Statistics Cont.** -To be able to interpret charts -To be able to make comparisons, find the sum and difference using tables and charts -To be able to explore line graphs -To be able to make comparisons, find the sum and difference using line graphs **Geometry: Properties of shape-Position and direction** **(19 lessons 4 weeks)** -To be able to identify turns and angles -To be able to identify right angles in shapes -To be able to compare angles -To be able to draw lines to the nearest cm and mm

to 1,000 **(To be able to flexibly partition numbers up to 10,000)** To be able to explore the use of hundreds, tens and ones **(To be able to find 1,000 more or less than a given number)** To be able to find 1, 10 or 100 more or less than a number To be able to use a number line up to 1,000 **(numbers up to 10,000)** To be able to compare objects **(To be able to estimate, figure out and place numbers on a number line to 10,000)** To be able to compare numbers **(To be able to compare 4-digit numbers)** To be able to count in 50s **To be able to place numbers in ascending and descending order** To be able to explore Roman Numerals up to 100 To be able to round to the nearest 10 To be able to round to the nearest 100 To be able to round to the nearest 1,000 To be able to round to the nearest 10, 100 or 1,000 **Addition and subtraction** **(11 lessons 5 weeks)** To be able to add 1s, 10s, 100s and 1,000s	To be able to spot patterns within addition and subtraction **Multiplication and division 16 lessons 6 weeks)** -To be able to identify, make and add equal **groups and use arrays** **To be able to use multiples of 2, 5 and 10** To be able to multiply by 10 -To be able to multiply by 100 To be able to know the difference between and use sharing and grouping for division To be able to divide by 10 -To be able to divide by 100 To be able to multiply and divide by 1 and 0 To be able to multiply by 3 **To be able to divide by 3** **To be able to use the 3 times table to multiply and divide** To be able to multiply by 4 To be able to divide by 4 **To be able to use the 4 times table to multiply and divide** To be able to multiply by 8 To be able to divide by 8 **To be able to use the 8 times table to multiply and divide** **To be able to use the 2, 4 and 8 times tables** -	-To be able to compare lengths -To be able to add and subtract lengths -To be able to measure and calculate perimeter -To be able to calculate a perimeter on a grid -To be able to calculate the perimeter of a rectangle and rectilinear shape -To be able to discuss the concept of area and calculate by counting squares -To be able to make shapes using a given number of squares -To be able to compare the areas of rectilinear shapes **Fractions** **17 lessons 4 weeks** -To be able to represent unit and non unit fractions -To be able to combine fractions to make a whole amount -To be able to identify and represent tenths -To be able to count in tenths -To be able to identify and represent tenths as decimals -To be able to represent fractions greater than 1 using a number line -To be able to find a fraction of an amount	-**Measurement: mass and capacity** -**Decimals** **15 lessons 3 weeks** -To be able to measure mass -To be able to compare mass -To be able to add and subtract mass -To be able to measure capacity -To be able to compare capacity -To be able to add and subtract capacity -To be able to identify tenths and hundredths using a hundred square -To be able to express tenths as decimals -To be able to read and represent tenths using a place value chart -To be able to read and represent tenths using a number line -To divide one and two-digit numbers by 10 -To be able to identify and represent hundredths -To be able to represent hundredths in decimal form -To be able to read and represent hundredths on a place value chart -To be able to divide one digit and two digit numbers by 100	-To be able to explore facts about months, years, days and hours -To be able to tell the time to the nearest 5 minutes and the nearest minute -To be able to use a.m and p.m -To be able to use a 24-hour clock -To be able to calculate and compare the duration of events -To be able to calculate start and end times -To be able to measure time in seconds -To be able to convert between hours, minutes and seconds -To be able to convert between years, months weeks and days -To be able to convert between analogue and 12-hour and 24 hour digital readings **Statistics** **(7 lessons 2 weeks)** -To be able to read, interpret and draw pictograms -To be able to read interpret and draw bar charts -To be able to read, interpret and draw tables	-**To be able to identify vertical and horizontal lines** -**To be able to identify parallel and perpendicular lines** -**To be able to identify, describe and draw 2-d shapes** -**To be able to identify describe and draw 3-d shapes** -**To be able to make 3D shapes** -**To be able to identify angles** -**To be able to compare and order angles** -**To be able to identify equilateral, isosceles, right angle and scalene triangles** -**To be able to identify various quadrilaterals** -**To be able to describe positions in the first quadrant** -**To be able to draw shapes and plot coordinates in the first quadrant** -**To be able to move shapes and coordinates in the first quadrant** -**To be able to describe the movement of shapes and coordinates in the first quadrant**

To be able to add two 4-digit numbers To be able to add two 4-digit numbers one exchange To be able to add two 4-digit numbers with more than one exchange -					
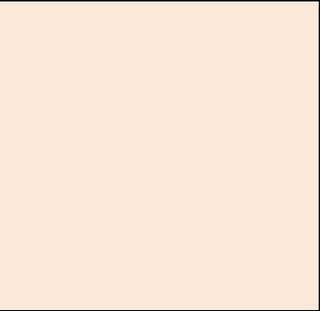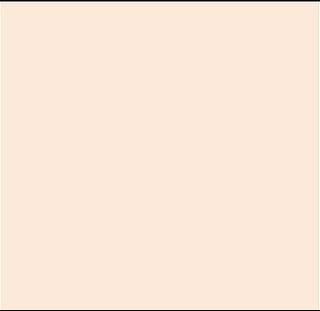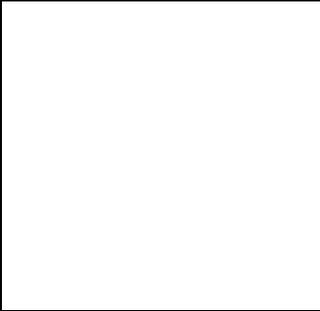
Maths Teaching Sequences Y5

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Concepts: -Place Value -Addition and subtraction	**Key Concepts:** -Multiplication and Division -Fractions	**Key Concepts:** -Multiplication and Division - Fractions	**Key Concepts:** -Decimals and Percentages -Measurement: Perimeter and Area Statistics	**Key Concepts:** Geometry: -Properties of Shape -Geometry: Position and Direction - Decimals	**Key Concepts:** -Decimals -Number- Negative numbers -Measurements: Converting units -Volume
Teaching Sequences: **Place Value (14 Lessons 5 Weeks)** To be able to use Roman Numerals up to 1,000 To be able to explore numbers up to 10,000 To be able to explore numbers up to 100,000 To be able to explore numbers up to 1,000,000 To be able to read, represent and write numbers up to 1,000,000 To be able to count in powers of 10 To be able to find 1, 10, 100, 1,000, 10,000 and 100,000 more and less than a number To be able to partition numbers up to 1,000,000 To be able to use a number line for numbers up to 1,000,000 To be able to compare and order numbers up to 100,000 To be able to compare and order numbers up to 1,000,000	**Teaching Sequences:** **Multiplication and Division A (11 Lessons 3 weeks)** To be able to identify multiples of a whole number. To be able to find common multiples To be able to identify factors of a whole number. To be able to find the common factors of 2 numbers. To be able to identify prime numbers. To be able to identify Square numbers. To be able to identify Cube numbers. To be able to multiply by 10, 100, 1000. To be able to divide by 10, 100, 1000. To be able to use related facts to calculate using other multiples of 10, 100, and 1000. **Fractions (10Lessons 3 Weeks)**	**Teaching Sequences:** -**Multiplication and Division B (7 Lessons 3 Weeks)** To be able to multiply 4-digit numbers by 1-digit numbers. To be able to use area models to multiply 2-digit numbers by 2-digit numbers. To be able to multiply 2-digit numbers by 2-digit numbers. To be able to multiply 3-digit numbers by 2-digit numbers. To be able to multiply 4-digit numbers by 2-digit numbers. To be able to divide 4-digit numbers by 1-digit numbers. To be able to divide 4-digit numbers by 1-digit numbers with remainders. **Fractions (10Lessons 3 Weeks)** To be able to add mixed numbers.	**Teaching Sequences:** -**Decimals and Percentages (10 Lessons 2 Weeks)** To be able to read, represent and write numbers with two decimal places. To be able to explore the relationship between decimals and fractions. To be able to explore the relationship between decimals and fractions greater than 1. To be able to explore the concept of thousandths. To be able to read, represent and write numbers with 3 decimal places. To be able to round decimal numbers to the first whole and tenth. To be able to compare and order numbers with 3 decimal places. To be able to explore the concept of percentages. To be able to represent percentages as fractions and decimals.	**Teaching Sequences:** **Geometry:** -**Properties of Shape (9 Lessons 3 Weeks)** To be able to measure angles in degrees. To be able to measure angles with a protractor (1) To be able to measure angles with a protractor (2) To be able to draw lines and angles accurately. To be able to calculate angles around a point. To be able to calculate lengths and angles in shapes. To be able to identify regular and irregular polygons. To be able to reason about 3D shapes. **Geometry:** **Position and Direction (5 Lessons 2 Weeks)** To be able to read and plot coordinates in the first quadrant. To be able to reflect coordinates in the first quadrant.	**Teaching Sequences:** Decimals cont. To be able to subtract numbers with different numbers of decimal places. To be able to add and subtract whole numbers and decimal numbers. To be able to describe and complete decimal sequences. To be able to multiply decimal numbers by 10, 100, 1000 To be able to divide decimal numbers by 10, 19 Lessons 3 00, 1000 **Negative numbers 4 lessons 1 week** -**Measurements: Converting units (6 Lessons 2 Weeks)** To be able to convert between g and kg and m and km. To be able to convert between ml and l and mm and m.

To be able to round to the nearest 10, 100, and 1,000 To be able to round numbers within 100,000 to the nearest 10, 100, 1,000 and 10,000 To be able to round numbers up to 1,000,000 **Addition and Subtraction (8 Lessons 5 Weeks)** To be able to use mental strategies for addition and subtraction To be able to add together 5-digit and 4-digit numbers To be able to subtract a 4-digit number from a 4-digit or 5-digit number To be able to use estimation to give approximate results To be able to use inverse operations to check results To be able to solve multi-step problems To be able to compare calculations To be able to compare calculations To be able to find missing numbers	To be able to explore equivalent fractions. To be able to convert improper fractions to mixed numbers. To be able to convert mixed numbers to Improper fractions. To be able to use fractions and mixed numbers within number sequences. To be able to compare and order fractions. To be able to compare and order improper fractions and mixed numbers. To be able to add and subtract fractions with the same denominator. To be able to add fractions with different denominators. To be able to three or more fractions. To be able to add fractions with a result greater tha n 1.	To be able to subtract fractions with different denominators. To be able to subtract proper fractions from mixed numbers (1) To be able to subtract proper fractions from mixed numbers (2) To be able to subtract a mixed number from a mixed number. To be able to multiply unit fractions by integers. To be able to multiply fractions by integers. To be able to multiply mixed numbers by integers. To be able to calculate a fraction of an amount. To be able to use fractions as operators. -	To be able to identify equivalent fractions, decimals and percentages. **-Measurement: Perimeter and Area (5 Lessons 2 Weeks)** To be able to measure perimeters. To be able to calculate perimeters. To be able to calculate the area of rectangles. To be able to calculate the area of compound shapes. To be able to estimate the area of an irregular shape. **Statistics (6 Lessons 2 Weeks)** To be able to interpret line graphs. To be able to draw line graphs. To be able to use line graphs to solve problems. To be able to read and interpret tables. To be able to read a two-way table. To be able to read timetables to extract information.	To be able to translate shapes on a grid. To be able to translate coordinates on a grid. **- Decimals (12 Lessons 4 Weeks)** To be able to add decimals within 1. To be able to subtract decimals within 1. To be able to find decimal complements to 1. To be able to add decimals crossing the whole. To be able to subtract numbers with the same number of decimal places. To be able to add numbers with different numbers of decimal places.	To be able to convert between various metric units. To be able to convert between metric and imperial units. To be able to convert between units of time. To be able to use timetables to retrieve information and solve problems. **-Volume (4 Lessons 1 Week)** To be able to explore volume. To be able to compare volume. To be able to estimate volume. To be able to estimate capacity. -

Maths Teaching Sequences Y6

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Concepts: **- Number Place Value** **-Addition, Subtraction, Multiplication and Division**	**Key Concepts:** **- Addition, Subtraction, Multiplication and Division cont.** **-Fractions** **- Measurement: Converting units**	**Key Concepts:** **-Ratio** **- Decimals** **-Algebra**	**Key Concepts:** **-Percentages** **Perimeter, Area and Volume** **- Statistics**	**Key Concepts:** **Geometry: Property of shape** **Geometry: Position and direction**	**Key Concepts:** **All previously taught**
Teaching Sequences: **-- Number Place Value (8 Lessons 5 Weeks)** To be able to represent numbers up to 1,000,000 To be able to represent numbers up to 10,000,000 To be able to represent numbers up to ten million To be able to use powers of 10 To be able to use a number line up to 10,000,000 To be able to compare and order numbers up to ten million To be able to round numbers to 10,000,000 To be able to explore negative numbers. **-Addition, Subtraction, Multiplication and Division (17 Lessons 5 Week)**	**Teaching Sequences:** **- Addition, Subtraction, Multiplication and Division cont.** **To be able to multiply 4-digit numbers by 2-digit numbers (2022-2023)** **To be able to solve problems using multiplication (2022-2023)** **To be able to use short division to divide 4-digit numbers by 2-digit numbers (2022-2023)** **To be able to use my knowledge of factors to divide 4-digit numbers by 2-digit numbers (2022-2023)** **To be able to divide 3-digit numbers by 2-digit numbers without remainders (2022-2023)** **To be able to divide 4-digit numbers by 2-digit numbers without remainders (2022-2023)**	**Teaching Sequences:** **Ratio (7 Lessons 2 Weeks)** To be able to use ratio terminology. To be able to compare fractions and ratio. To be able to use a colon as a ratio symbol. To be able to calculate using ratio. To be able to use scale factors to enlarge shapes. To be able to use scale factors to calculate. To be able to solve ratio and proportion problems. **Algebra (10 Lessons 2 Weeks)** To be able to find and express a one-step rule. To be able to find and express a two-step rule. To be able to form algebraic expressions.	**Teaching Sequences:** **-Percentages (7 Lessons 2 Weeks)** To be able to convert fractions to percentages. To be able to find equivalence between fractions, decimals and percentages. To be able to compare fractions, decimals and percentages. To be able to calculate the percentage of an amount (1) To be able to calculate the percentage of an amount (2) To be able to calculate a missing percentage or a whole amount from a percentage. To be able to calculate percentage increases and decreases.	**Teaching Sequences:** **-** **Geometry: Property of shape (11 Lessons 3 Weeks)** To be able to measure with a protractor. To be able to explore angle facts and real-world use of angles. To be able to calculate angles on a straight line and around a point. To be able to calculate angles using vertically opposite angles knowledge. To be able to calculate missing angles in triangles. (1) To be able to calculate missing angles in triangles. (2) To be able to calculate missing angles in triangles. (3)	**Teaching Sequences:** **Consolidation and themed projects linked to transition. To be planned and delivered alongside secondary colleagues**

To be able to add and subtract integers. To be able to find the common factors of two numbers) To be able to find common multiples (2022-2023) To be able to apply rules of divisibility (2022-2023) To be able to identify prime numbers to 100 (2022-2023) To be able to explore relationships between square and cube numbers (2022-2023) .	To be able to divide 3-digit numbers by 2-digit numbers with remainders (2022-2023) To be able to divide 4-digit numbers by 2-digit numbers with remainders (2022-2023) To be able to use BIDMAS to complete calculations using the correct order of operations (2022-2023) To be able to use mental strategies to solve calculations efficiently (2022-2023) To be able to solve calculations using known facts (2022-2023) **Fractions A(16 Lessons 4 Weeks)** To be able to simplify fractions. To be able to place fractions on a number line. To be able to compare and order fractions with different denominators To be able to compare and order fractions by using a common numerator. To be able to add and subtract fractions. To be able to add and subtract fractions. To be able to add mixed numbers. To be able to subtract mixed numbers. To be able to add and subtract fractions and mixed numbers. **Fractions B** To be able to multiply fractions by integers.	To be able to use symbols and letters for substitution. To be able to use formulae. To be able to form equations. To be able to solve one-step equations. To be able to solve two-step equations. To be able to find pairs of values (1) To be able to find pairs of values (2) **- Decimals (9 Lessons 2 Weeks)** To be able to revise numbers with 3 decimal places. To be able to multiply numbers with up to three decimal places using 10, 100, 1000. To be able to divide numbers with up to three decimal places using 10, 100, 1000. To be able to multiply a number with up to 3 decimal places by an integer. To be able to divide a number with up to 2 decimal places by an integer. To be able to use division to solve problems. To be able to explore the relationship between decimals and fractions. To convert between fractions and decimals (1) To convert between fractions and decimals (2)	**- Measurement: Converting units (5 Lessons 1 Week)** To be able to identify, read and write metric measurements for length, mass and capacity. To be able to convert metric units of measurement. To be able to calculate using metric units of measurement. To be able to convert between miles and km. To be able to convert between imperial units and between metric and imperial units of measurement. **Perimeter, Area and Volume (8 Lessons 2 Weeks)** To be able to investigate rectangles and rectilinear shapes with the same area. To be able to calculate the perimeter and area of rectangles and rectilinear shapes. To be able to calculate the area of a triangle (1) To be able to calculate the area of a triangle (2) To be able to calculate the arTo be able to explore anea of a triangle (3) To be able to calculate the area of a parallelogram. To be able to calculate volume by counting cubes. To be able to calculate the volume o9f a cuboid. **Statistics (8 Lessons 2 Weeks)**	To be able to calculate missing angles in quadrilaterals. To be able to explore interior angles in polygons. To be able to draw shapes accurately. To be able to identify 3D shapes from their net. **Geometry: Position and Direction (4 Lessons 1 Week)** To be able to plot coordinates in the first quadrant. To be able to read and plot coordinates in all four quadrants. To be able to translate points and shapes in all four quadrants. To be able to reflect points and shapes in all four quadrants.	

	To be able to multiply fractions by a fraction.		To be able to read and interpret line graphs.		
	To be able to divide a fraction by an integer (1)		To be able to draw line graphs.		
	To be able to divide a fraction by an integer (2)		To be able to solve line graph problems.		
	To be able to use BIDMAS when calculating using fractions.		To be able to annotate and name parts of a circle.		
	To be able to calculate a fraction of an amount.		To be able to read and interpret pie charts.		
	To be able to calculate the whole amount from a fractional amount.		To be able to read and interpret pie charts with percentages.		
			To be able to draw pie charts.		
	Converting units		To be able to calculate the mean.		
	To be able to identify, read and write metric measurements for length, mass and capacity				
	To be able to convert metric units of measurement				
	To be able to calculate using metric units of measurement				
	To be able to convert between miles and km				
	To be able to convert between imperial units and between metric and imperial units of measurement				