

# **Scheme of Learning and Assessments**

## **BLPA Mathematics**

**2021-22**



Bracken Lane  
Primary Academy

## Reception – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Number: To 5			Number: Sorting	Number: Comparing groups		Interventions
Autumn 2	Calculations: one more/less			Measure: Time		Interventions/Project	
Spring 1	Calculations: Number bonds to 5	Number: To 10		Number: Comparing numbers to 10	Calculations: Addition to 10		
Spring 2	Calculations: Number bonds to 10		Shape and Space: Spatial awareness 2D and 3D shapes			Interventions	
Summer 1	Exploring Patterns		Number: Counting on and back		Number: counting to 20	Number patterns: Doubling	
Summer 2	Number patterns: Halving and sharing, odd and even		Measurement: length, height, distance	Measurement: weight	Measurement: Volume and Capacity	Project	

## Year 1 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Number: Place Value and part-whole (Numbers to 10)			Number: Addition and Subtraction (within 10)			Catch up / Interventions
Autumn 2	Number: Addition and Subtraction (within 10) revisit	Geometry: Shape (2D and 3D)	Number: Place Value (Numbers to 20)				Catch up / Interventions
Spring 1	Calculations: Addition to 20	Calculations: subtraction within 20		PiXL Spring Paper			
				Number: Place value (Numbers to 50)			
Spring 2	Measurement: Length and Height		Measurement: Weight and Volume		Catch up/interventions (Revise place value to 50 and calculations within 20)		
Summer 1	Calculations: Multiplication and Division			Halves and Quarters	PiXL Summer Papers		
					Position and Direction	Catch up / Interventions	
Summer 2	PiXL Summer Papers		Measurement: Time		Measurement: Money	Interventions: Addition, Subtraction, Multiplication, Division	
	Number: Place value to 100						

## Year 2 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
Autumn 1	Number: Place Value (numbers to 100)		Calculations: Addition and Subtraction (Including addition of two 2 digit numbers)					
Autumn 2	Y2 2018 SATs papers			Calculations: Multiplication and Division	Calculations: Multiplication and Division	Measurement: Time (unit 13)	Catch up / Interventions	SATS STYLE QUESTIONS
	Measurement: Money		Calculations: Multiplication and Division					
Spring 1	Calculation: Multiplication and Division		Statistics: Tally/Pictograms		Measurement: Length and Height	Catch up /interventions		
Spring 2	Geometry: Properties of Shape (2D and 3D)	Y2 2019 SATs papers						Fractions
		Geometry: Properties of Shape (2D and 3D)		Fractions				
Summer 1	Geometry: Position and Direction	Interventions / Revision	2KS1 SATs					
			Problem solving and efficient methods /Revision					
Summer 2	Measurement: Time		Measurement: Weight, Volume, Temperature		Revise Fractions	Revision - Fluency of calculation		

# Year 3 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Number: Place value (numbers to 1000)			Calculations: Addition and Subtraction (to 3 digit and 2 digit numbers)	PiXL Autumn Papers		
					Calculations: Addition and Subtraction (to 3 digit and 2 digit numbers)		Catch up/ Interventions
Autumn 2	Calculations: Addition and subtraction (to 3 digit and 3 digit numbers)		Calculations: Multiplication and Division			Catch up/Interventions	
Spring 1	Calculations: Multiplication and Division			Measurement: Money	PiXL Spring Papers		
					Statistics: Pictograms, Bar Charts, Tables	Measurement: Length	
Spring 2	PiXL Papers	Fractions (1)				Catch up/ Interventions	
	Measurement: Length (cont'd)						
Summer 1	Fractions (2)			Measurement: Time	PiXL Summer Papers		
					Measurement: Time	Geometry: Angles and Properties of shapes	
Summer 2	PiXL Summer Papers			Measurement: Capacity	Revision- Fluency of calculation and Fractions		
	Geometry: Angles and Properties of shapes (cont'd)		Measurement: Mass				

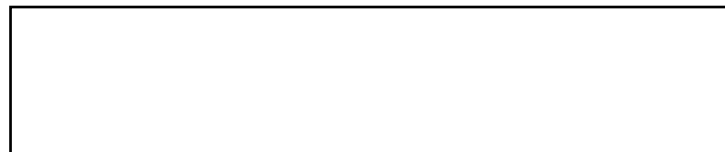
## Year 4 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Number: Place value – order and compare 4 digit numbers			Number: Place value – order and compare 4 digit numbers, rounding, negative numbers	PiXL Autumn Papers		
					Number: Place value – order and compare 4 digit numbers, rounding,	Calculations: Addition and Subtraction (4 digit numbers)	Catch up /interventions
Autumn 2	Calculations: Addition and Subtraction (4 digit numbers)		Measurement: Perimeter	Calculations: Multiplication and Division (by 0,1,10,100 and 6,7,8,9,10,11,12)			Revision / Intervention
Spring 1	Calculations: Multiplication and Division (by 2 and 3digit numbers)			Measurement: Area	PiXL Spring Papers		
					Fractions: Tenths, hundredths, equivalent, simplifying	Revision / Interventions	
Spring 2	PiXL Papers	Fractions: Adding and Subtracting		Number: Decimals (tenths, hundredths)		Revision / Interventions	
	Fractions: Tenths, hundredths, equivalent, simplifying						
Summer 1	Number: Decimals (comparing, ordering, rounding)		Measurement: Money		PiXL Summer Papers		
					Measurement: Time	Revision / Interventions	
Summer 2	PiXL Summer Papers			Geometry: Position and Direction			Revision / Interventions
	Statistics: Charts, Tables, Line graphs	Geometry: Angles and 2D shapes					

# Year 5 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Number: Place Value (to 100,000)		Number: Place Value (to 1,000,000)		PiXL Autumn Papers		
					Calculations: Addition and Subtraction (more than 4 digits, rounding, inverse operations)		Catch up/ Interventions
Autumn 2	Statistics: Graphs and Tables	Calculations: Multiplication and Division (factors, prime numbers, squares, cubes)		Measure: Area and Perimeter		Catch up geometry from Y3/4	Revision / Interventions
Spring 1	Calculations: Multiplication and Division (up to 4 digits by 2 digits, division with remainders)			Fractions: comparing, ordering and division	PiXL Spring Papers		
					Fractions: comparing, ordering and division	Fractions: adding and subtracting	
Spring 2	PiXL Papers		Fractions: Multiplying	Number: Decimals and Percentages			
	Fractions: adding and subtracting	Fractions: adding and subtracting					
Summer 1	Number: Decimals (adding, subtracting, multiplying and dividing)			Geometry: Properties of shapes (angles, protractor use)	PiXL Summer Papers		
					Geometry: Properties of shapes (angles, protractor use)	Geometry: Properties of shapes (parallel and perpendicular lines, polygons)	
Summer 2	PiXL Summer Papers			Measurement: Converting units	Measurement: Volume and Capacity	Revision/Interventions	
	Geometry: Position and Direction (reflections, translation, Co-ordinates)	Measurement: Converting units					

# Year 6 – Yearly Overview



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	Number: place value to 10,000,000	Calculations: Four Operations (1)		Calculations: Four Operations (2)		Revision (revisit Y4/5 Geometry)	
Autumn 2	Y6 2017 SATs papers				Geometry: Position and Direction	Revision – securing knowledge of prior learning in Y4/5/6)	
	Fractions: simplifying, comparing and ordering, adding and subtracting (1)	Fractions: simplifying, comparing and ordering, adding and subtracting (1)	Fractions: multiplying and dividing				
Spring 1	Number: Decimals		Number: Percentages		Algebra		
Spring 2	Y6 2019 SATs papers				Ratio and Proportion	Geometry: Properties of shapes and revision (or unit 13)	
	Measurement: converting/imperial and metric	Measurement: perimeter, area and volume		Ratio and Proportion			
Summer 1	Bespoke Revision			2022 SATS WEEK	Geometry: Properties of shape (unit 13)		
Summer 2	Number: Problem solving			Statistics		Transition Maths	



# ***Year 6 – Small Steps***

## Number and Place Value

- Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit
- Round any whole number to a required degree of accuracy

## Calculations: The four operations

- Add and subtract whole numbers
- Multiply up to a 4-digit number by a 2-digit number
- Short division
- Long Division
- Factors, multiples and primes
- Squares and cubes
- BIDFMAS
- Mental calculations and estimation
- Reasoning from known facts

## Fractions

- Simplify fractions
- Fractions on a number line
- Compare and order fractions (using numerator and denominator)
- Add and subtract fractions
- Multiply fractions by a whole number
- Multiply fractions by a fraction
- Divide a fraction by a whole number
- Fraction of an amount

## Decimals

- Three decimal places
- Multiply by 10, 100 and 1000
- Divide by 10, 100, 1000
- Multiply decimals by integers
- Divide decimals by integers
- Decimals as fractions
- Fraction to decimals

## Converting Units

- Metric measures

- Converting metric measures
- Calculate with metric measures
- Mile and kilometres
- Imperial measures

### Percentages

- Fraction to percentages
- FDP equivalence
- Percentage of amount
- Percentages – missing value
- Percentage increase and decrease
- Order FDP

### Negative Numbers

- Use negative numbers in context
- Calculate intervals across zero

### Perimeter, Area and Volume

- Shapes – same area different perimeters and vice versa
- Area and perimeter
- Area of a triangle
- Area of a parallelogram
- Volume – counting cubes
- Volume of a cuboid

### Properties of shapes

- Measure with a protractor
- Introduce angles
- Calculate angles
- Vertically opposite angles
- Angles – triangles
- Angles – special cases
- Find missing angles
- Angles – quadrilateral
- Angles – regular polygons
- Draw shapes
- Draw nets

### Position and direction

- Coordinates in the first quadrant
- Plotting coordinates
- Translations

- Reflections
- Reasoning about shape with coordinates

### Ratio

- Using ratio language
- Ratio and fractions
- Introduce the ratio symbol
- Calculating ratio
- Using scale factors
- Ratio and proportion problems

### Algebra

- Find a rule – one step
- Find a rule – two step
- Use an algebraic rule
- Substitution
- Formulae
- Word problems
- Solve simple one step equations
- Solve two step equations

### Statistics

- Read and interpret line graphs
- Draw lines graphs
- Use line graphs to solve problems
- Circles
- Read and interpret pie charts
- Pie charts with percentages
- Draw pie charts
- The mean