# Scheme of Learning and Assessments 

BLPA Mathematics

2023-24

Bracken Lane
Primary Academy

## Reception - Yearly Overview

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: To 5 |  |  | Number: Comparing groups within 5 |  | Shape: (3D \& 2D) |  |
|  | Shape: (3D \& 2D) | Number: Chan | nge within 5 | Calculations: Bonds within 5 | Space | Interventions |  |
| - | Number: To 10 |  | Number: Comparing numbers within 10 | Calculations: <br> Addition to 10 | Measure: Length, height, weight |  |  |
| N ¢0 - in | Calculations: Nu | er bonds to 10 | Calculations: <br> Subtraction | Exploring Pattern |  | Interventions |  |
|  | Calculations: counting on/counting back |  | Number: to 20 | Numerical patterns |  |  |  |
| $N$ N ¢ É U | Shape: composing and decomposing | Measure: volume/capacity | Sorting | Measurement: Time | Project/ Interventions |  |  |

## Year 1 - Yearly Overview

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place Value and part-whole (Numbers to 10) |  |  | Number: Addition and Subtraction (within 10) |  |  |  |
|  | Number: Addition and Subtraction (within 10) revisit | Geometry: Shape (2D and 3D) |  | Number: Place Value (Numbers to 20) |  |  | Catch up / Interventions |
| $\checkmark$ |  | Calculations: subtraction within 20 |  |  PiXL Spring Paper <br> Number: Place value (Numbers to 50)  |  |  |  |
| - | Addition to 20 |  |  |  |
|  | PiXL Sp | Paper | Measurement: Weight and Volume |  |  |  | eight and Volume | Catch up/interventions <br> (Revise place value to 50 and calculations within 20) |  |  |
| - | Measurement: | gth and Height |  |  |  |  |  |
| $\checkmark$ | Calculations: Multiplication and Division |  |  |  | PiXL Summer Papers |  |  |  |  |
| む E E ज |  |  |  | Halves and Quarters | Position and Direction | Catch up / Interventions |  |  |  |
|  | PiXL Summer Papers |  | Measurement: Time |  | Measurement: Money | Interventions: <br> 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place Value (numbers to 100) |  | Calculations: Addition and Subtraction (Including addition of two 2 digit numbers) |  |  |  |  |
| $\sim$ | Y2 2019 SATs papers |  |  | Calculations: <br> Multiplication and Division | Measurement: Time (unit 13) | Catch up / Interventions | SATS STYLE QUESTIONS |
| 長 | Measurement: Money |  | Calculations: <br> Multiplication and Division |  |  |  |  |
|  | Calculation: Multiplication and Division |  | Statistics: Tally/Pictograms |  | Measurement: Length and Height | Catch up /interventions |  |
| $\sim$ | Y2 2022 SATs papers |  |  |  | Fractions |  |  |
| $\begin{aligned} & \text { Nㅡㅁ } \\ & \hline \end{aligned}$ | Properties of Shape (2D and 3D) | Geometry: Properties of Shape (2D and 3D) |  | Fractions |  |  |  |
| $\checkmark$ | Geometry: Position and Direction | Interventions / Revision | 2KS1 SATs |  |  |  |  |
| 品 |  |  | Problem solving and efficient methods /Revision |  |  |  |  |
|  | Measurement: Time |  | Measurement: Weight, Volume, Temperature |  | Revise Fractions | Revision - <br> Fluency of calculation |  |

## Year 3 - Yearly Overview

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place value (numbers to 1000) |  |  | PiXL Autumn Papers |  |  |  |
|  |  |  |  | Calculations: Addition and Subtraction (to 3 digit and 2 digit numbers) | Calculations: Addition and Subtraction (to 3 digit and 2 digit numbers) |  |  |
| $\begin{aligned} & N \\ & \stackrel{N}{E} \\ & \frac{1}{3} \\ & \frac{1}{4} \end{aligned}$ | Calculations: Addition and subtraction (to 3 digit and 3 digit numbers) |  | Calculations: Multiplication and Division |  |  | Catch up/Interventions |  |
|  | Calculations: Multiplication and Division |  |  | PiXL Spring Papers |  |  |  |
| - |  |  |  | Measurement: Money | Statistics: <br> Pictograms, Bar Charts, Tables | Measurement: Length |  |
|  | PiXL Papers |  |  | Fractions (1) |  | Catch up/ Interventions |  |
| $\stackrel{\text { - }}{\substack{0 \\ 0}}$ | Measurement: <br> Length (cont'd) | Fractions (1) |  |  |  |  |  |
|  | Fractions (2) |  |  | Measurement: Time |  | PiXL Summer Papers |  |
| $\begin{aligned} & \stackrel{\otimes}{E} \\ & \underset{E}{E} \\ & \tilde{v} \end{aligned}$ |  |  |  | Geometry: Angles and Properties of shapes |  |  |
|  | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place value - order and compare 4 digit numbers |  |  | PiXL Autumn Papers |  |  |  |
|  |  |  |  | Number: Place value order and compare 4 digit numbers, rounding, negative numbers | Number: Place value order and compare 4 digit numbers, rounding, | Calculations: Addition and Subtraction (4 digit numbers) |  |
| $\xrightarrow[N]{N}$ | Calculations: Addition and Subtraction (4 digit numbers) |  | Measurement: <br> Perimeter | Calculations: Multiplication and Division (by $0,1,10,100$ and$6,7,8,9,10,11,12)$ |  |  | Revision / <br> Intervention |
|  | Calculations: Multiplication and Division (by 2 and 3digit numbers) |  |  | PiXL Spring Papers |  |  |  |
|  |  |  |  | Measurement: Area | Fractions: Tenths, hundredths, equivalent, simplifying | Revision / Interventions |  |
| $\begin{aligned} & \text { N } \\ & \text { © } \\ & \stackrel{0}{0} \\ & \text { n } \end{aligned}$ | PiXL Papers |  |  | Number: Decimals (tenths, hundredths) |  |  |  |
|  | Fractions: Tenths, hundredths, equivalent, simplifying | Fractions: Adding and Subtracting | Fractions: Adding and Subtracting |  |  | Revision / Interventions |  |
|  | Number: Decimals (comparing, ordering, rounding) |  | Measure | t: Money | Measurement: Time | PiXL Summer Papers |  |
|  |  |  | Revision / Interventions |  |  |  |
|  | PiXL Summer Papers Multiplication Tables check |  |  | Geometry: Position and Direction |  |  |  |
|  | Statistics: Charts, Tables, Line graphs | Geometry: Angles and 2D shapes |  |  |  |  | Revision / Interventions |

## Year 5 - Yearly Overview

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place Value (to 100,000) |  | Number: Place Value (to 1,000,000) | PiXL Autumn Papers |  |  | Revision / Interventions |
|  |  |  | Number: Place Value (to 1,000,000) | Calculations: Addition and Subtraction (more than 4 digits, rounding, inverse operations) |  |  |
|  | Statistics: Graphs and Tables | Calculations: Multiplication and Division (factors, prime numbers, squares, cubes) |  | cation and Division ers, squares, cubes) | Measure: Area and Perimeter |  |  | Revise geometry from Y3/4 |
| -00$\stackrel{0}{0}$n | Calculations: Multiplication and Division (up to 4 digits by 2 digits, division with remainders) |  |  | PiXL Spring Papers |  |  |  |
|  |  |  |  | Fractions: comparing, ordering and division | Fractions: comparing, ordering and division | Fractions: adding and subtracting |  |
|  | PiXL Spring Papers |  |  | Number: Decimals and Percentages |  |  |  |
|  | Fractions: adding and subtracting | Fractions: adding and subtracting | Fractions: <br> Multiplying |  |  |  |  |
|  | Number: Decimals (adding, subtracting, multiplying and dividing) |  |  | Geometry: Properties of shapes (angles, protractor use) |  | PiXL Summer Papers |  |
|  |  |  |  | Geometry: Properties of shapes (parallel and perpendicular lines, polygons) |  |  |
|  | 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

If furthers SATs papers are required use those that have not been scheduled into the assessment calendar.


## 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 decease
- 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

