Subject:

## Curriculum Provision Statement

Inspiring Excellence Our days are always filled with MAGIC

## Context

Our diverse socio-economic backgrounds and the varying levels of English proficiency at Keir Hardie Primary School makes the teaching and learning of Mathematics crucial for our pupils. Teaching for mastery will help create much-needed opportunities for our pupils to thrive and succeed.
According to the Organization for Economic Co-operation and Development (OECD), "students who fall behind in mathematics are less likely to attend college or pursue careers in fields such as science, technology, engineering, and mathematics (STEM). This not only limits their economic mobility but also exacerbates income inequality and perpetuates cycles of poverty."
We agree with His Majesty's Chief Inspector, Sir Michael Wilshaw "We must all play our part to ensure that all pupils receive the best possible mathematics education."

| Intent | Implementation | Impact |
| :--- | :--- | :--- |
| Based on our contextual strengths and <br> challenges, our Maths intent is for our pupils to <br> acquire a deep, long-term, secure and <br> adaptable understanding of Mathematics. <br> We want our pupils to use their long-term and <br> working memory to progress, achieve and <br> excel. | To achieve our Intent, Our Curriculum is well <br> designed and sequenced to ensure that <br> pupils have opportunities to recap and <br> deepen their understanding. We use Inspire <br> Maths to support this approach as well as <br> White Rose Education. It also supports our <br> parents to develop effective ways of teaching <br> and learning Maths. We are also part of the | A majority of our pupils achieve mastery by <br> acquiring a solid understanding of the maths <br> before moving on to more advanced <br> material. It prepares them for the next stage of <br> their education, by helping to develop an <br> understanding of how maths is important in <br> our daily lives. |
| We want our pupils to become fluent in the <br> fundamentals (impacted by the pandemic) of <br> "sustaining group" of our local Mathshub( a <br> Mathematics so that they engage with and | For each pupil, the starting point and exit <br> point show good or better progress, which |  |

enjoy Maths lessons. From EYFS to Year 6, we want our pupils to reason mathematically and solve problems. We want our pupils to become resilient mathematicians when faced with maths challenges. We will support our pupils to "struggle" and explore different ways of overcoming maths challenges and solving problems.

To prepare our pupils for the future, we want our pupils to be problem solvers. We want to create extensive opportunities for our pupils to develop and apply skills that are necessary for the next stage of their education and the world of work.

To ensure good or better progress for all, some pupils are targeted and supported.
Our Maths lessons, which are based on a mastery approach, are taught with the " 5 big ideas" in mind, Coherence, using small steps, which makes it more accessible for all. Representation through the use of manipulatives and "stem" sentences. We use the concrete, pictorial and abstract approach to ensure access for all and support for those who need it. We also ensure that pupils are fluent by giving them opportunities to practise key facts during lessons, as part of our basic skills sessions, or during pre teaching and catch up sessions. This is further supported through the use of Sumdog and Times Tables Rock Stars. Our lessons ensure that mathematical Variation is considered and explored, so our pupils see the "maths" in different contexts. Questions are carefully selected and used at the beginning of Maths lessons to engage our pupils and get them thinking, justifying and explaining. We use journaling to capture pupils' understanding.
contributes significantly to our pupils' developing a positive attitude towards Maths, with an ability to apply their mathematical knowledge across other subjects. Our disadvantaged pupils achieve exceptionally well.

Our pupils solve problems, reason, explain and justify using a medium that suits their learning style. As a result, they enjoy and always look forward to the next maths challenge.


## Subject Coverage

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\begin{array}{|l|l|l|l|}\hline & \text { Autumn } & \text { Spring } & \text { Summer } \\
\hline \text { EYFS } & \begin{array}{l}\text { Count objects, actions and sounds } \\
\text { Linking number symbol ( numeral) with its cardinal number value } \\
\text { Counting and Cardinality } \\
\text { Compare numbers } \\
\text { Understand the one more than/ one less than relationship between consecutive numbers } \\
\text { Explore the composition of numbers to } 10 \\
\text { Automatically recall number bonds for numbers 0-5 and some to 10 } \\
\text { Select,rotate and manipulate shapes in order to develop spatial reasoning skills } \\
\text { Compose and decompose shapes } \\
\text { Continue, copy and create repeating patterns } \\
\text { Compare length, weight and capacity }\end{array} \\
\hline \text { Year 1 } & \begin{array}{l}\text { Number: Place Value( within 10) } \\
\text { Number : Addition and } \\
\text { Subtraction(within 10) } \\
\text { Geometry: Shape } \\
\text { Consolidation }\end{array} & \begin{array}{l}\text { Number: Place Value ( within 20) } \\
\text { Number: Addition and Subtraction } \\
\text { (within 20) }\end{array} & \begin{array}{l}\text { Number: Multiplication and Division } \\
\text { Number: Fractions }\end{array}
$$ <br>
Number: Place Value(within 50) <br>
Geometry: Position and Direction <br>
Number: Place Value( within 100) <br>

Measurement: Money\end{array}\right\}\)| Measurement: Length and Height |
| :--- |
| Measurement: Mass and Volume |


| Year 2 | Number: Place Value <br> Number: Addition and Subtraction <br> Geometry: Shape | Measurement: Money <br> Number: Multiplication and Division Measurement: Length and Height Measurement: Mass, Capacity and Temperature | Number: Fractions <br> Measurement: Time <br> Statistics <br> Geometry: Position and Direction <br> Consolidation |
| :---: | :---: | :---: | :---: |
| Year 3 | Number: Place Value <br> Number: Addition and Subtraction Number: Multiplication and Division A | Number: Multiplication and Division <br> B <br> Measurement: Length and Perimeter <br> Number: Fractions A <br> Measurement: Mass and Capacity | Number: Fractions B Measurement: Money Measurement: Time Geometry: Shape Statistics Consolidation |
| Year 4 | Number: Place Value <br> Number: Addition and Subtraction <br> Measurement: Area <br> Number: Multiplication and Division A <br> Consolidation | Number: Multiplication and Division <br> B <br> Measurement: Length and <br> Perimeter <br> Number: Fractions <br> Number: Decimals A | Number: Decimals B <br> Measurement: Money <br> Measurement: Time <br> Consolidation <br> Geometry: Shape <br> Statistics <br> Geometry: Position and Direction |
| Year 5 | Number: Place Value <br> Number: Addition and Subtraction Number: Multiplication and Division A <br> Number: Fractions | Number: Multiplication and Division <br> B <br> Number: Fractions B <br> Number: Decimals and <br> Percentages <br> Measurement: Perimeter and Area Statistics | Geometry: Shape Geometry: Position and Direction Number: Decimals Number: Negative Numbers Measurement: Converting units Measurement: Volume |
| Year 6 | Number: Place Value Number: Addition, Subtraction Multiplication and Division <br> Number: Fractions A <br> Number: Fractions B <br> Measurement: Converting units | Number: Ratio <br> Number: Algebra <br> Number: Decimals <br> Number: Fractions, Decimals and <br> Percentages <br> Measurement: Area, Perimeter and <br> Volume | Geometry: Shape Geometry: Position and Direction Consolidation |


|  |  | Statistics |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Manipultives |  |  |  |
| Timestable Rockstars |  |  |  |
| Sumdog |  |  |  |
| Newham competitions |  |  |  |
| London/ National competitions |  |  |  |
| Maths week |  |  |  |
| Cross curricular links |  |  |  |
| Maths dictionary to develop vocabital |  |  |  |
| Use of Widgit |  |  |  |

## EYFS Essential Knowledge

Count reliably with numbers from 1 to 20
Write numbers from 0-9 with correct formation

Recognise numbers 1-20 and place numbers in order

Say which number is one more or one less than a given number to 20
Year 1 Essential Knowledge

## Year 2 Essential Knowledge

Count at least 100 objects reliably

Count on and back in $1 \mathrm{~s}, 2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s
Can double up to $10+10$
Count to over 100

Explain value of digits (to 3 digits)
Read, write \& order numbers up to 100

Read, write \& order numbers from 0 to at least 100

| Say what is one more \& one less than a given number to 100 | Know by heart addition and subtraction facts to 20 \& use all bonds to 10 |
| :---: | :---: |
| Add \& subtract two numbers using the correct symbols within 20 | Know all number pairs to 100 using 'ten' numbers |
| Know by heart addition and subtraction facts to 20 \& use bonds to at least 20 | Can double all numbers up to 10 and halve all even numbers up to 20 Know by heart $x 2, \times 5$ and $\times 10$ and division facts |
|  | Tell time to half \& quarter hour |
| Year 3 Essential Knowledge | Year 4 Essential Knowledge |
| Read, write and order numbers to 1000 and know value the of each digit | Read, write and order numbers to 10,000 , and know value of each digit |
| Count on and back in fours, tens, fiftieths and hundreds from any number under 1000 | Count in $6 \mathrm{~s}, 7 \mathrm{~s}, 9 \mathrm{~s}, 25 \mathrm{~s}$ and 1000 s and count back past zero on a number line |
| Know by heart addition \& subtraction facts to 20 | Count up and down in tenths and hundredths |
| Add and subtract mentally up to 3 digit numbers | Know by heart all times tables to $12 \times 12$ (and division facts). New multiplication and |
| Add and subtract one digit and two digit numbers using the column method | division facts in Y4 are $\times 6 \times 7 \times 9 \times 11$ and $\times 12$ |
|  | Round numbers (up to 3 digits) to the nearest 10, 100 or 1000 |
| Know by heart $x 2, x 3, x 4, x 5, x 8$ and $x 10$ (and division facts) |  |
|  | Add and subtract mentally, pairs of two-digit numbers |
| Do simple divisions, e.g. 25 divided by 5 |  |
|  | Multiply and divide 2 digit numbers by 10 or 100 |
| Find simple fractions, e.g. $1 / 2,1 / 3,1 / 4,1 / 5,1 / 10$ of shapes \& amounts |  |
|  | Divide (up to 4 digits) numbers by 10 or 100 |
| Count up and down in tenths |  |
|  | Multiply and divide numbers up to 100 by $2,3,4$ or 5 and find remainders |
| Use £.p and know value of amounts |  |
|  | Identify pairs of fractions that total 1 and equivalent fractions |


|  | Tell times to nearest minute <br> Solve problems including fractions and decimals to 2.d.p |
| :---: | :---: |
| Year 5 Essential Knowledge | Year 6 Essential Knowledge |
| Read, write and order numbers to 3 dp ; know value of each digit up to 1,000,000 <br> Multiply \& divide positive integers up to $1,000,000$ by powers of 10 <br> Order sets of positive and negative integers <br> Calculate halves \& doubles of decimals (to 1dp) <br> Round numbers with 1 or 2dp to nearest integer <br> Use division to find fractions of a number <br> Know the $\%$ and decimals of $1 / 2,1 / 4,1 / 5,2 / 5$ and $4 / 5$ and any fractions with a denominator which is a multiple of 10 or 25 <br> Mentally add and subtract increasingly large numbers <br> Know by heart all multiplication facts to $12 \times 12$ (\& division facts) <br> Identify multiples and factor pairs of a number and identify common factors of 2 <br> numbers <br> Use long multiplication and long division with increasingly large numbers | Multiply and divide integers and decimals mentally by powers of 10 <br> Use tables to work with decimals (to 1 dp ) <br> Use multiplication facts to derive squares of numbers to $12 \times 12$ <br> Order mixed set of numbers (up to 3dp) <br> Work out simple \% and fractions of whole numbers <br> Work out which fraction is larger/smaller by cancelling common factors <br> Recall equivalences between fractions, decimals and percentages <br> Use appropriate written methods <br> Use pencil \& paper methods \& mental methods to add \& subtract decimals <br> Divide numbers and record the remainder as a decimal to 2dp <br> Round answers to a given degree of accuracy |

