Key Stage Bridge

Mathematics Long Term Plan


| Curriculum Focus | Week | Content Focus |
| :---: | :---: | :---: |
| Number: Place Value | WK1 | Counting forwards and backwards within 20 Tens and one within 20 |
|  | WK2 | Counting forwards and backwards within 50 Tens and ones within 50 |
|  | WK3 | Compare numbers within 50 <br> Count objects to 100 and read and write numbers in numerals and words |
| Number: Addition and Subtraction | WK4 | Fact families- addition and subtraction bonds to 20 |
|  | WK5 | Check calculations |
|  | WK6 | Compare number sentences |
|  | Wk7 | Related facts |
|  | WK8 | Bonds to 100 (tens) <br> Add and subtract 1's |
| Measurement: Money | WK9 | Recognising coins |
|  | WK10 | Recognising notes |
|  | WK11 | Count money- pence |
|  | WK12 | Count money- pounds (notes and coins) |
| Number: <br> Multiplication and Division | WK1 | Make equal groups |
|  | WK2 | Add equal groups |
|  | WK3 | Make arrays |
|  | WK4 | Recognise equal groups |
|  | WK5 | Make equal groups |
|  | WK6 | Add equal groups |
|  | Wk7 | The multiplication symbol |
| Statistics | WK8 | Make tally charts |
|  | WK9 | Draw pictograms (1-1) |
| Geometry: <br> Properties of Shape | WK10 | Recognise 2-D and 3-Shapes |
|  | WK11 | Count sides on 2-D shapes Count vertices on 2-D shapes |
|  | WK12 | Draw 2D shapes |
| Number: Fractions | WK1 | Make equal parts |
|  | WK2 | Recognise a half |
|  | WK3 | Find a half |
| Measurement: Length and Height | WK4 | Compare lengths and heights |
|  | WK5 | Measure lengths part 1 |
| Geometry: Position and Direction | WK6 | Describe position part 1 |
|  | Wk7 | Describe position part 2 |
| Measurement: Time | WK8 | Telling the time to the hour Telling the time to the half hour |
|  | WK9 | O'clock and half past |
|  | WK10 | Introduce weight and mass |

Measurement:
WK11 $\quad$ Measure mass
Mass, Capacity and
Temperature
WK12
Compare mass

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Key Stage Bridge
Mathematics Long Term Plan
Planning Year 2

| Term | Curriculum Focus | Week | Content Focus |
| :---: | :---: | :---: | :---: |
| Autumn 1 | Number: Place Value | WK1 | Represent numbers to 100 <br> Tens and ones with a part-whole model |
|  |  | WK2 | Tens and ones using addition Use a place value chart |
|  |  | WK3 | Compare objects Compare numbers |
|  | Number: Addition and Subtraction | WK4 | 10 more and 10 less |
|  |  | WK5 | Add and subtract 10's |
|  |  | WK6 | Add by making 10 |
| Autumn$2$ |  | Wk7 | Add a 2-digit and 1-digit number- crossing ten |
|  |  | WK8 | Subtraction- crossing 10 |
|  | Measurement: Money | WK9 | Count money- notes and coins |
|  |  | WK10 | Select money |
|  |  | WK11 | Make the same amount |
|  |  | WK12 | Compare money |
| Spring 1 | Number: <br> Multiplication and Division | WK1 | Multiplication sentences from pictures |
|  |  | WK2 | Use arrays |
|  |  | WK3 | Making doubles |
|  |  | WK4 | 2 times table |
|  |  | WK5 | 5 times table |
|  |  | WK6 | 10 times table |
| Spring 2 |  | Wk7 | Make equal groups- sharing part 1 |
|  | Statistics | WK8 | Interpret pictograms (1-1) |
|  |  | WK9 | Draw pictograms (2, 5 and 10) |
|  | Geometry: <br> Properties of Shape | WK10 | Lines of symmetry |
|  |  | WK11 | Sort 2-D shapes <br> Make patterns with2D shapes |
|  |  | WK12 | Count faces on 3D shapes Count edges on 3D shapes |
| Summer 1 | Number: Fractions | WK1 | Recognise a quarter |
|  |  | WK2 | Find a quarter |
|  |  | WK3 | Recognise a third Find a third |
|  | Measurement: Length and Height | WK4 | Measure lengths part 2 |
|  |  | WK5 | Measure lengths in cm Measure lengths in m |
|  | Geometry: Position | WK6 | Describe movement |
| $\begin{gathered} \text { Summer } \\ 2 \end{gathered}$ | and Direction | Wk7 | Describe turns |
|  | Measurement: | WK8 | Quarter past and quarter to |
|  | Time | WK9 | Telling the time to 5 minutes |
|  | Measurement: <br> Mass, Capacity and Temperature | WK10 | Measure mass in grams Measure mass in kilograms |
|  |  | WK11 | Introduce capacity and volume Measure capacity |
|  |  | WK12 | Compare volume |

## Key Stage Bridge <br> Mathematics Long Term Plan <br> Planning Year 3

| Term | Curriculum Focus | Week | Content Focus |
| :---: | :---: | :---: | :---: |
| Autumn$1$ | Number: Place Value | WK1 | Order objects and numbers |
|  |  | WK2 | Count in 2's Count in 5's |
|  |  | WK3 | Count in 10's <br> Count in 3's |
|  | Number: Addition and Subtraction | WK4 | Subtract a 1-digit number from a 2-digit number- crossing ten Add by making 10 |
|  |  | WK5 | Add two 2-digit numbers- not crossing ten- add ones and add tens Add two 2-digit numbers- crossing ten- add ones and add tens |
|  |  | WK6 | Subtract a 2-digit number from a 2-digit number- not crossing ten Subtract a 2-digit number from a 2-digit number- crossing ten |
| Autumn 2 |  | Wk7 | Find and make number bonds |
|  |  | WK8 | Bond to 100 (tens and ones) Add three 1-digit numbers |
|  | Measurement: Money | WK9 | Find the total |
|  |  | WK10 | Find the difference |
|  |  | WK11 | Find change |
|  |  | WK12 | Two-step problems |
| Spring 1 | Number: <br> Multiplication and Division | WK1 | Make equal groups- sharing part 2 |
|  |  | WK2 | Make equal groups- grouping part 1 |
|  |  | WK3 | Make equal groups- grouping part 2 |
|  |  | WK4 | Divide by 2 |
|  |  | WK5 | Odd and Even numbers |
|  |  | WK6 | Divide by 5 |
| Spring 2 |  | Wk7 | Divide by 10 |
|  | Statistics | WK8 | Interpret pictograms (2, 5 and 10) |
|  |  | WK9 | Block diagrams |
|  | Geometry: <br> Properties of Shape | WK10 | Count vertices on 3-D shapes |
|  |  | WK11 | Sort 3-D shapes |
|  |  | WK12 | Make patterns with 3-D shapes |
| Summer | Number: Fractions | WK1 | Unit fractions Non-Unit fractions |
|  |  | WK2 | Equivalence of $1 / 2$ and $2 / 4$ |
|  |  | WK3 | Find three quarter Count in fractions |
|  | Measurement: Length and Height | WK4 | Compare lengths Order lengths |
|  |  | WK5 | Four operations with lengths |
|  | Geometry: Position | WK6 | Describe movement and turns |
| Summer$2$ | and Direction | Wk7 | Making patterns with shapes |
|  | Measurement: Time | WK8 | Writing time Hours and days |
|  |  | WK9 | Find durations of time Compare durations of time |


|  | Measurement: | WK10 | Millilitres |
| :---: | :---: | :---: | :--- |
|  | Mass, Capacity and |  |  |
|  | Temperature | WK11 | Litres |
|  | WK12 | Temperature |  |

## Unit Skill and Knowledge Development

## Mathematics

## KS3 Bridge

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Autumn <br> Identify related facts to 20 and know the purpose of the $=$ symbol. <br> Use a range of checking strategies when concluding addition and subtraction calculations. Use terminology such as greater than, less than and equal to symbols to compare number sentences. <br> Explore related facts in addition and subtraction. <br> Use 10 frames for number bonds to 100. Add and subtract by 1's to calculate one more and one less. | Autumn <br> Add and subtract 10's from a given number. Add numbers within 20 using number bonds. <br> Understand the difference between 1-digit and two-digit numbers and use the number line more efficiently. <br> Partitioning to make 10 using 10 frames and number lines. | Autumn <br> Count to 20 and need to be able to partition 2digit numbers in order subtract from them. <br> Focus on language of 10 s and ones and look at different methods to add the numbers including the column method. <br> Use base 10 and partitioning to add together to delete numbers including an exchange. <br> Use concrete materials to draw images of the base 10 to independently solve problems. <br> Use knowledge that 110 is the same as 10 ones to exchange when crossing at 10 in subtraction. Use knowledge of number bonds to 10 to find number bonds to 20. Build on earlier work on number bonds to 100 with tens together with number bonds to 10 and 20. Use knowledge of commutativity to find the most efficient and quick way to add the three one digit numbers. |

Unit Skill and Knowledge Development

## Mathematics

## KS3 Bridge

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Summer <br> Understand the concept of a whole as being one object or one quantity. <br> Understand that halving is splitting a whole into two equal parts. <br> Find a half of a set of objects or quantity. Links should be made to dividing by 2 . | Summer <br> Extend knowledge of the whole and halves to recognise quarters of shapes, objects and quantities. <br> Find quarters of shapes, objects and quantities. Apply understanding of fractions to finding thirds. <br> Build on their understanding of a third and three equal parts to find a third of a quantity. | Summer <br> Understand the concept of a unit fraction by recognising it as one equal part of a whole. <br> Introduce the non-unit fractions $2 / 3$ and $\frac{3}{4}$ for the first time. <br> Explore the equivalence of two quarters and one half of the same whole and understand that they are the same. <br> Use understanding of quarters to find three quarters of a quantity. <br> Use knowledge of halves, thirds and quarters, to count in fractions from any number up to 10. | SCHOOL

Unit Skill and Knowledge Development

## Mathematics

KS3 Bridge

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Spring <br> Make equal groups using concrete materials. Use equal groups to find total number within 50. Use arrays recognising the importance of the columns and rows. <br> Recognise equal and unequal groups and refer to the $2 x$ table facts. <br> Expose to numerals and words for multiple representations. <br> Begin to relate the connecting of equal groups to repeated addition. <br> Introduce the $x$ symbol. | Spring <br> Use the multiplication symbol and work out the total from pictures. <br> Explore arrays to see the commutativity of multiplication facts e.g. $5 \times 2=2 \times 5$. Explore doubling with numbers up to 20. 2 times table. 5 times table. <br> 10 times table. <br> Explore sharing as a model of division. <br> Use 1:1 correspondence to share concrete objects into equal groups. | Spring <br> Divide by sharing objects into equal groups using one-to-one correspondence. <br> Start with a given total and make groups of an equal amount. <br> Divide by making equal groups. use this knowledge to help them divide by 2. Recognise odd and even numbers. Divide by 5. Divide by 10. |

Unit Skill and Knowledge Development

## Mathematics

KS3 Bridge

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Autumn <br> Introduced to number 11-20 to count forwards and backwards within 20. <br> Counting in 10's to 20. Count forwards and backwards within 50. <br> Count in tens and ones to 50. <br> Compare two amounts of objects within 50. <br> Count objects to 100 represented in numerals and word. | Autumn <br> Represent number to 100 with concrete materials. <br> Number representation of tens and ones in number to 100. <br> Whole-part model to explore how tens and ones can be partitioned. <br> Use a place value chart to aid understanding of place value. <br> Compare objects by using $\langle\rangle,,=$ symbols. <br> Compare number using the language greater than, less than, more than, fewer, most, least and equal to. <br> Add 10 more or subtract 10 from numbers within $100 .$ | Autumn <br> Order numbers from smallest to greatest or greatest to smallest. <br> Build on previous knowledge of counting in multiples of two and go beyond 20 u to 50. Build on previous learning of counting in fives to go beyond 20 and up to 50. <br> Count in groups of tens for the first time. Count forwards and backwards in 3's from any multiple of 3 . |

## Mathematics

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Spring <br> Recognise 2-D shapes by name, recognise 2-D shapes are flat. <br> Count sides of 2-D shapes developing strategies to be able to do this. <br> Introduce vertex and vertices. <br> Create own 2-D shapes and name them. | Spring <br> Introduced to the concept of vertical lines of symmetry. <br> Recognise and sort 2-D shapes including circle, square, triangle, rectangle, pentagon, hexagon and octagon using a range of different orientations. <br> Use knowledge of the properties of 2-D shapes to create patterns. <br> Use knowledge of 2-D shapes to identify the shapes of faces on 3-D shapes. <br> Use knowledge of faces and curved surfaces to help them to identify edges on 3-D shapes. | Spring <br> Use knowledge of edges to help them to identify vertices on 3-D shapes. <br> Use knowledge of shape properties to sort 3-D shapes in different ways e.g. faces, shapes of faces, edges, vertices, if they roll, if they stack. Use knowledge of the properties of 3-D shapes to create patterns. | SCHOOL

Unit Skill and Knowledge Development

## Mathematics <br> KS3 Bridge

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Summer <br> Use 'left', 'right', 'forwards' and 'backwards' to describe position and direction. <br> Build upon directional language 'left' and 'right' to assist with describing position. | Summer <br> Use language 'forwards', 'backwards', 'up', 'down', 'left' and 'right' to describe movement in a straight line. <br> Describe turns using the language 'full turn', 'half turn', 'quarter turn', 'three-quarter turn', 'clockwise' and 'anticlockwise'. | Summer <br> Use knowledge of movement and turns to describe and record directions. <br> Build on previous knowledge of patterns and repeating patterns. |

## Unit Skill and Knowledge Development

## Mathematics <br> KS3 Bridge

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| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Summer <br> Understand the language of long, longer, short and shorter by comparing lengths and height. Use nonstandard units to measure length and height. | Summer <br> Build on prior knowledge of measuring length and height using non-standard units and apply this to measuring using a ruler. Measure to the nearest centimetre using a ruler or tape measure. Begin to measure larger objects using metres. | Summer <br> Compare lengths of objects using comparison language and symbols. <br> Order more than two lengths from shortest to longest and vice versa. <br> Draw on their skills of the four operations and apply their understanding to length. |

## Unit Skill and Knowledge Development

## Mathematics

KS3 Bridge

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Autumn <br> Recognise and know the value of different coins. Recognise and know the value of different notes. Count coins in pence. Count coins and notes in pounds. | Autumn <br> Count money coins and notes by bringing pounds and pence together. <br> Select coins to make a stated amount. Explore different ways of making the same amount. Compare two different values in either pounds or pence using greater than and less than. | Autumn <br> Build on their knowledge of addition to add money including: 2-digit and 2-digit, 2-digit and ones. 2-digit and tens, 3 -single digits. Expand their knowledge of addition and subtraction strategies by specifically finding the difference between two amounts. <br> Build on subtraction skills by finding change from a given amount. <br> Draw together all of the skills they have used in this block and consolidate their previous addition and subtraction learning. |

## Mathematics <br> KS3 Bridge

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| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :--- | :--- | :--- | :--- |
| $\ddot{\text { 2 }}$ | Summer <br> Introduced to telling the time to the hour using | Summer <br> Read and draw the times 'quarter to' and <br> an analogue clock. | Summer <br> Explore the difference between seconds, <br> minutes and hours. <br> Rearter past'. |
| Read and show analogue time to 5-minute |  |  |  |
| intervals. |  |  |  |$\quad$| Learn that there are 24 hours in a day and 60 |
| :--- |
| minutes in an hour. |
| Identify the start and end time of an event. |
| Compare times using 'longer' and 'shorter'. |
| Telling the time to half an hour. Read and write |
| times from clocks. | SCHOOL

## Unit Skill and Knowledge Development

## Mathematics

## KS3 Bridge

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 |
| :---: | :---: | :---: | :---: |
|  | Summer <br> Introduced to weight and mass for the first time. Begin by using a variety of non-standard units (e.g. cubes, bricks) to measure the mass of an object. <br> Recap by comparing the mass of different objects. | Summer <br> Continue to use balance scales before moving on to use standard weighing scales. <br> Use knowledge of measuring mass in grams to start to measure mass in kilograms. <br> Introduced to volume and capacity for the first time. <br> Measure the capacity of different containers using non-standard units of measure. <br> Compare the volume of containers using < , > and $=$. | Summer <br> Introduced to standard units of millilitres (ml) for the first time. <br> Introduced to litres (I) as a standard unit for the first time. <br> Introduced to temperature, thermometers and the units 'degrees Centigrade', written ${ }^{\circ} \mathrm{C}$ for the first time. |

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## Unit Skill and Knowledge Development

## Mathematics <br> KS3 Bridge

| Unit | Planning Years 1 | Planning Years 2 | Planning Years 3 |
| :---: | :---: | :---: | :---: |
|  | Spring <br> Introduce tally charts as a method for recording data. <br> Draw pictograms using tally charts. | Spring <br> Use knowledge of one-to-one correspondence to help them interpret and answer questions about the data presented in pictograms. <br> Draw pictograms where the symbols represent 2, 5 or 10 items. | Spring <br> Collected own data previously in tally charts and constructed larger scale pictograms practically. Build block diagrams using cubes and then move to drawing and interpreting block diagrams. |

