HALLMOOR SCHOOL

| Term | Curriculum Focus | Week | Content Focus |
| :---: | :---: | :---: | :---: |
| Autumn <br> 1 | Number: Place Value | WK1 | Sort objects Count objects |
|  |  | WK2 | Represents objects |
|  |  | WK3 | Count, read and write forwards and backwards from any number 0-10 |
|  |  | WK4 | Count one more Count one less |
|  | Number: Addition and Subtraction | WK5 | Part-whole model |
|  |  | WK6 | Addition Symbol Fact families- addition facts |
| Autumn$2$ |  | Wk7 | Find number bonds for numbers within 10 part 1 and 2 Calculate number bonds |
|  |  | WK8 | Number bonds to 10 Compare number bonds |
|  |  | WK9 | Addition- adding together Addition- adding more |
|  | Geometry: Shape | WK10 | Recognise and name 2D shapes Sort 2D Shapes |
|  | Number: Place Value | WK11 | One to one correspondence to start to compare groups Compare groups using language such as equal, more/greater, less/fewer |
|  |  | WK12 | Introduce <>and = symbols Compare numbers |
| Spring 1 | Number: Addition and Subtraction | WK1 | Finding a part |
|  |  | WK2 | Subtraction- taking away how many left? Crossing out <br> Subtraction- taking away, how many left? <br> Introducing the subtraction symbol |
|  |  | WK3 | Subtraction- finding a part, breaking apart Fact families- the 8 facts |
|  |  | WK4 | Subtraction- counting back |
|  | Number: Place Value | WK5 | Order groups of objects Order numbers |
|  |  | WK6 | Ordinal numbers ( $\left.1^{\text {st }}, 2^{\text {nd }}, 3^{\text {rd }}\right)$ The Number line |
| Spring 2 |  | Wk7 | Count forwards and backwards and write numbers to 20 in numerals and words. <br> Numbers from 11-20 |
|  | Measurement: Length and Height | WK8 | Compare lengths and height (1) |
|  |  | WK9 | Compare lengths and height (2) |
|  | Measurement: <br> Weight and Volume | WK10 | Introduce weight and mass |
|  |  | WK11 | Measure mass |
|  |  | WK12 | Compare mass |



|  |  | Math | rimary Formal atics Long Term Plan |
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| HALLMOOR SCHOOL |  |  | anning Year 2 |
| Term | Curriculum Focus | Week | Content Focus |
|  |  | WK1 | Order groups of objects Order numbers |
|  | Number: Place Value | WK2 | Numbers to 50 Tens and ones |
| Autumn 1 |  | WK3 | Represent numbers to 50 |
|  |  | WK4 | One more, one less |
|  |  | WK5 | Find the difference |
|  | Number: Addition | WK6 | Compare statements Compare addition and subtraction sentences |
|  | and Subtraction | Wk7 | Add by counting on |
|  |  | WK8 | Find and make number bonds |
|  |  | WK9 | Add by making 10 |
| Autumn 2 | Geometry: Shape | WK10 | Recognise and name 3D shapes <br> Sort 3D Shapes <br> Patterns with 3D and 2D shapes |
|  | Number: Place | WK11 | Compare objects within 50 Compare numbers within 50 |
|  |  | WK12 | Order numbers within 50 |
| Spring 1 <br>  <br> Spring 2 | Number: Addition and Subtraction | WK1 | Subtraction- not crossing 10 |
|  |  | WK2 | Subtraction crossing 10 |
|  |  | WK3 | Related facts |
|  |  | WK4 | Compare number sentences |
|  | Number: Place Value | WK5 | Count in 2's Count in 5's |
|  |  | WK6 | Counting forwards and backwards within 100 |
|  |  | Wk7 | Partitioning Numbers |
|  | Measurement: <br> Length and Height | WK8 | Measure length |
|  |  | WK9 | Measure length using a ruler |
|  | Measurement: Weight and Volume | WK10 | Introduce capacity and volume |
|  |  | WK11 | Measure capacity |
|  |  | WK12 | Compare capacity |
| Summer$1$ | Number: <br> Multiplication and Division | WK1 | Add equal groups |
|  |  | WK2 | Make arrays |
|  |  | WK3 | Make Doubles |
|  |  | WK4 | Make equal groups- grouping Make equal groups- sharing |
|  | Number: Fractions | WK5 | Find a quarter (1) |
|  |  | WK6 | Find a quarter (2) |
| Summer 2 | Geometry: Position and Direction | Wk7 | Describe position of objects and shapes part 1 and 2 |


| Number: Place <br> Value | WK8 | Comparing numbers |  |
| :---: | :---: | :---: | :--- |
|  | Measurement: <br> Money | WK9 | Ordering numbers <br> One more, one less |
|  | WK10 | Recognising notes <br> Counting coins |  |
|  | WK11 | Time to the half hour <br> Writing time |  |
|  | WK12 | Comparing time |  |


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| HALLMOOR SCHOOL |  | Planning Year 3 |  |
| Term | Curriculum Focus | Week | Content Focus |
| Autumn$1$ | Number: Place Value | WK1 | Counting forwards and backwards within 20 Tens and one within 20 |
|  |  | WK2 | Counting forwards and backwards within 50 Tens and one within 50 Compare numbers within 50 |
|  |  | WK3 | Count objects to 100 and read and write numbers in numerals and words <br> Represent numbers to 100 <br> Tens and ones with a part-whole model |
|  | Number: Addition and Subtraction | WK4 | Fact families- addition and subtraction bonds to 20 Check calculations Compare number sentences |
|  |  | WK5 | Related facts Bonds to 100 (tens) |
|  |  | WK6 | Add and subtract 1's <br> 10 more and 10 less |
| Autumn$2$ |  | Wk7 | Add and subtract 10's Add by making ten |
|  |  | WK8 | Add a 2-digit and 1-digit number- crossing ten <br> Subtraction- crossing 10 <br> Subtract a 1-digit number from a 2-digit number- crossing ten |
|  | Measurement: Money | WK9 | Recognising coins recognising notes Count money- pence |
|  |  | WK10 | Count money- pounds (notes and coins) Count money- notes and coins Select money |
|  | Number: | WK11 | Make equal groups |
|  | Multiplication and Division | WK12 | Add equal groups Make arrays |
| Spring 1 | Number: <br> Multiplication and Division | WK1 | Recognise equal groups Make equal groups Add equal groups |
|  |  | WK2 | Multiplication sentences using the x symbol Multiplication sentences from picture |
|  |  | WK3 | Use arrays |
|  |  | WK4 | Make doubles |
|  | Statistics | WK5 | Make tally charts |
|  |  | WK6 | Draw pictograms (1-1) <br> Interpret pictograms (1-1) |
| Spring 2 | Geometry: Properties of Shape | Wk7 | Recognise 2-D and 3-Shapes Count sides on 2-D shapes |
|  |  | WK8 | Count vertices on 2-D shapes Draw 2-D shapes |
|  |  | WK9 | Lines of symmetry <br> Sort 2-D shapes |


|  |  | WK10 | Make equal parts Recognise a half |
| :---: | :---: | :---: | :---: |
|  | Number: Fractions | WK11 | Find a half Recognise a quarter |
|  |  | WK12 | Find a quarter Recognise a third Find a third |
| Summer 1 | Measurement: <br> Length and Height | WK1 | Compare lengths and heights |
|  |  | WK2 | Measure lengths part 1 and 2 |
|  |  | WK3 | Measure lengths (cm) <br> Measure lengths (m) |
|  | Geometry: Position and Direction | WK4 | Describe position part 1 Describe position part 2 |
|  |  | WK5 | Describe movement |
|  |  | WK6 | Describe turns |
| $\begin{gathered} \text { Summer } \\ 2 \end{gathered}$ | Measurement: <br> Time | Wk7 | Telling the time to the hour Telling the time to the half hour |
|  |  | WK8 | O'clock and half past Quarter past and quarter to |
|  | Measurement: <br> Mass, Capacity and Temperature | WK9 | Introduce weight and mass Measure mass |
|  |  | WK10 | Compare mass |
|  |  | WK11 | Measure mass in grams Measure mass in kilograms |
|  |  | WK12 | Introduce capacity and volume Measure capacity |


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| HALLMO SCHOO |  |  | anning Year 4 |
| Term | Curriculum Focus | Week | Content Focus |
|  |  | WK1 | Tens and ones using addition Use a place value chart Compare objects |
|  | Number: Place Value | WK2 | Compare numbers Order objects and numbers Count in 2's |
| Autumn $1$ |  | WK3 | Count in 5's <br> Count in 10's <br> Count in 3's |
|  |  | WK4 | 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 |
|  | Number: Addition | WK5 | Subtract a 2-digit number from a 2 -digit number- not crossing ten Subtract a 2-digit number from a 2 -digit number- crossing tensubtract ones and tens |
|  |  | WK6 | Find and make number bonds |
|  |  | Wk7 | Bond to 100 (tens and ones) |
|  |  | WK8 | Add three 1-digit numbers |
| Autumn | Measurement: | WK9 | Make the same amount <br> Compare money <br> Find the total |
| Autumm | Money | WK10 | Find the difference <br> Find change <br> Two-step problems |
|  | Number: | WK11 | 2 times table |
|  | Multiplication and Division | WK12 | 5 times table 10 times table |
| Spring 1 | Number: <br> Multiplication and Division | WK1 | Make equal groups- sharing part 1 and 2 |
|  |  | WK2 | Make equal groups- grouping part 1 and 2 |
|  |  | WK3 | Divide by 2 Odd and Even |
|  |  | WK4 | Divide by 5 Divide by 10 |
|  | Statistics | WK5 | Draw pictograms (2, 5 and 10) Interpret pictograms (2, 5 and 10) |
|  |  | WK6 | Block diagrams |
| Spring 2 | Geometry: <br> Properties of Shape | Wk7 | Make patterns with 2-D shapes |
|  |  | WK8 | Count faces on 3-D shapes Count edges on 3-D shapes Count vertices on 3-D shapes |
|  |  | WK9 | Sort 3-D shapes <br> Make patterns with 3-D shapes |
|  | Number: Fractions | WK10 | Unit fractions Non-Unit fractions |
|  |  | WK11 | Equivalence of $1 / 2$ and $2 / 4$ |


|  |  | WK12 | Find three quarter Count in fractions |
| :---: | :---: | :---: | :---: |
| Summer <br> 1 | Measurement: Length and Height | WK1 | Compare lengths |
|  |  | WK2 | Order lengths |
|  |  | WK3 | Four operations with lengths |
|  | Geometry: Position and Direction | WK4 | Describe movement and turns |
|  |  | WK5 |  |
|  |  | WK6 | Making patterns with shapes |
| Summer$2$ | Measurement: Time | Wk7 | Telling the time to 5 minutes Writing time |
|  |  | WK8 | Hours and days <br> Find durations of time <br> Compare durations of time |
|  | Measurement: <br> Mass, Capacity and Temperature | WK9 | Compare volume |
|  |  | WK10 | Millilitres |
|  |  | WK11 | Litres |
|  |  | WK12 | Temperature |


| PrimaryFormalMathematics Long Term Plan |  |  |  |
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| HALLMOOR SCHOOL |  | Planning Year 5 |  |
| Term | Curriculum Focus | Week | Content Focus |
| Autumn <br> 1 | Number: Place Value | WK1 | Represent numbers to 100 <br> Tens and ones using addition |
|  |  | WK2 | Hundreds <br> Represent numbers to 1000 |
|  |  | WK3 | $100 \mathrm{~s}, 10 \mathrm{~s}$ and 1s part 1 and 2 |
|  | Number: Addition and Subtraction | WK4 | Add and subtract multiples of 100 Add and subtract 1s |
|  |  | WK5 | Add and subtract 3-digit and 1-digit numbers- not crossing 10 |
|  |  | WK6 | Add 2-digit and 1-digit numbers- crossing 10 Add 3-digit and 1-digit numbers- crossing 10 |
| Autumn$2$ |  | Wk7 | Subtract a 1-digit number from 2-digits- crossing 10 <br> Subtract a 1-digit number from a 3-digit number- crossing 10 |
|  |  | WK8 | Add and subtract 3-digit and 2-digit numbers- not crossing 100 Add 3-digit and 2-digit numbers- crossing 100 |
|  | Number: <br> Multiplication and Division | WK9 | Multiplication- equal groups Multiplication using the symbol |
|  |  | WK10 | Using arrays |
|  |  | WK11 | 2 times table <br> 5 times table |
|  |  | WK12 | Make equal groups- sharing Make equal groups- grouping |
| Spring 1 | Number: <br> Multiplication and Division | WK1 | Divide by 2 <br> Divide by 5 <br> Divide by 10 |
|  |  | WK2 | Multiply by 3 <br> Divide by 3 <br> The 3 times table |
|  |  | WK3 | Multiply by 4 <br> Divide by 4 <br> The 4 times table |
|  | Measurement: Money | WK4 | Count money (pence) <br> Count money (pounds) <br> Pounds and pence <br> Convert pounds and pence |
|  | Statistics | WK5 | Make tally charts |
|  |  | WK6 | Draw pictograms (2, 5 and 10) Interpret pictograms (2,5 and 10) |
| Spring 2 | Measurement: <br> Length and Perimeter | Wk7 | Measure length Measure length (m) |
|  |  | WK8 | Equivalent lengths- $m$ and cm Equivalent lengths- mm and cm |
|  |  | WK9 | Compare lengths parts 1 and 2 |
|  | Number: Fractions | WK10 | Make equal parts |
|  |  | WK11 | Recognise a half Find a half |


|  |  | WK12 | Recognise a quarter <br> Find a quarter |
| :---: | :---: | :---: | :---: |
| Summer$1$ | Number: Fractions | WK1 | Recognise a third Find a third |
|  |  | WK2 | Unit Fractions Non- unit fractions |
|  |  | WK3 | Equivalence of $1 / 2$ and $2 / 4$ Count in Fractions |
|  | Measurement: <br> Time | WK4 | O'clock and half past Quarter past and quarter to |
|  |  | WK5 | Months and years Hours in a day |
|  |  | WK6 | Telling the time to 5 minutes Telling the time to the minute |
| $\begin{gathered} \text { Summer } \\ 2 \end{gathered}$ | Geometry: <br> Properties of Shape | Wk7 | Turns and angles Right angles in shapes Compare angles |
|  |  | WK8 | Draw accurately Horizontal and vertical |
|  | Measurement: Mass, Capacity and Temperature | WK9 | Compare mass |
|  |  | WK10 | Measure mass part 1 and 2 |
|  |  | WK11 | Compare mass |
|  |  | WK12 | Add and subtract mass |

Mathematics Long Term Plan

## Planning Year 6

| Term | Curriculum Focus | Week | Content Focus |
| :---: | :---: | :---: | :---: |
| Autumn 1 | Number: Place Value | WK1 | Number line to 1000 <br> Find 1, 10, 100 more or less than a given number |
|  |  | WK2 | Compare objects to 1000 <br> Compare numbers to 1000 |
|  |  | WK3 | Order numbers Count in 50's |
|  | Number: Addition and Subtraction | WK4 | Subtract a 2-digit number from a 3-digit number- crossing 100 <br> Add and subtract 100s <br> Spot the pattern- making it explicit |
|  |  | WK5 | Add two 2-digit numbers -crossing 10-add ones and add tens Subtract a 2-digit number from a 2-digit number- crossing 10 |
|  |  | WK6 | Add and subtract a 2-digit and 3-digit numbers- not crossing 10 or 100 <br> Add a 2-digit and 3-digit numbers- crossing 10 or 100 <br> Subtract a 2-digit number from a 3-digit number- crossing 10 or $100$ |
| Autumn$2$ |  | Wk7 | Add two 3-digit numbers- not crossing 10 or 100 <br> Add 3-digit numbers- crossing 10 or 100 <br> Subtract a 3-digit number from a 3-digit number- no exchange <br> Subtract a 3-digit number from a 3-digit number- exchange |
|  |  | WK8 | Estimate answers to calculations Check answers |
|  | Number: <br> Multiplication and Division | WK9 | Multiply by 8 Divide by 8 The 8 times table |
|  |  | WK10 | Consolidate 2, 4 and 8 times-table |
|  |  | WK11 | Comparing statements Related calculations |
|  |  | WK12 | Multiply 2-digits by 1 digit part 1 and 2 |
| Spring 1 | Number: <br> Multiplication and Division | WK1 | Divide 2-digits by 1 digit part 1, 2 and 3 |
|  |  | WK2 | Scaling |
|  |  | WK3 | How many ways? |
|  | Measurement: Money | WK4 | Add money Subtract money Give change |
|  |  | WK5 | Pictograms |
|  | Statistics | WK6 | Bar Charts Tables |
| Spring 2 | Measurement: <br> Length and Perimeter | Wk7 | Add lengths |
|  |  | WK8 | Subtract lengths |
|  |  | WK9 | Measure perimeter Calculate perimeter |
|  | Number: Fractions | WK10 | Making the whole Tenths |
|  |  | WK11 | Count in tenths |



| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Autumn <br> Part whole model- part, part, whole-leading to number bonds. Introduced to the addition (+), subtraction (-) and equals ( $=$ ) signs to create number sentences. <br> Addition fact families are commutative. <br> Whole part model to explore number bonds to 10. <br> Systematic number bonds using equipment to 10. <br> Use knowledge of place value to compare number bonds and number sentences. <br> Use the whole part model to understand the concept of addition using the + and = symbols. <br> Move from counting all to counting on. <br> Spring <br> Solve missing number problems. Introduced to the language of subtraction as how many left. <br> Include the use of zero meaning the number remains the same. <br> Story representations can be used. <br> Introduction of the - symbol. <br> Subtraction by partitioning. <br> Link subtraction and addition facts including the use of zero. <br> Count backwards to subtract. | Autumn <br> Find the difference as a form of subtraction. <br> Introduce the inequality symbols to compare statements recapping on the = symbol. <br> Compare simple statements using addition and subtraction calculations, use. <, > and =. Explore addition by counting on from any number up to 20. <br> Find number bonds to 20. <br> Add numbers within 20 using their knowledge of number bonds. <br> Spring <br> Build on the language of subtraction, recognising and using the subtraction symbol within 20. <br> Introduce to subtraction where they have to cross ten. <br> Explore addition and subtraction fact families for numbers within 20. <br> Compare number sentences within 20 using inequality symbols. | Autumn <br> Identify related facts to 20 and know the purpose of the = symbol. Use a range of checking strategies when concluding addition and subtraction calculations. <br> 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. <br> Add and subtract by 1's to calculate one more and one less. Add and subtract 10 's from a given number. <br> 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. | Autumn <br> Partitioning to make 10 using 10 frames and number lines. <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. 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. | Autumn <br> Add and subtract multiples of 100. Add numbers greater than 100. Understand the value of the digits. See patterns when adding or subtracting 1 stating what happens. Continue the patterns by adding 2 and 3. <br> Add and subtract 1s from a 3-digit number without an exchange. Column method can be used, and mental arithmetic encouraged. <br> Add 2 digit and 1-digit numbers crossing 10. Have a strong understanding of place value, be able to partition a 2-digit number and line them up in columns. Add 3 digit and 1-digit numbers. Add ones to a 3-digit numbers with an exchange. Know when adding ones, it can affect the one column and the tens column. Single digit can only be held in each column. Zero is a place value holder. Subtract a 1-digit number from 2 digits crossing 10. Understand the difference between one digit and two digit and line them up in columns. <br> Subtract a 1-digit number from a 3-digit number crossing 10 using an exchange. <br> Add and subtract 3 digit and 2digit numbers not crossing 100. Explore what happens to a 3-digit number when a multiple of 10 is added or subtracted. <br> Add 3 digit and 2 digits crossing 100. Add multiples of 10 to a 3digit number with an exchange. | Autumn <br> Subtract multiples of 10 from a three-digit number, with an exchange. <br> Build on their knowledge of adding one hundreds together e.9., 300+500, by adding ones and tens to solve calculations such as $234+500$. <br> Consolidate adding ones, 10s and hundreds to three-digit numbers. Look for patterns between calculations to enable them to predict answers and to develop their number sense. <br> Use base 10 am partitioning to add together 2-digit numbers including an exchange. <br> Use their knowledge that 110 is the same as 10 ones to exchange when crossing attend in subtraction. <br> Focus on the position of numbers and place value to add and subtract 2 digit and three-digit numbers. Deepen their understanding of adding 2 digit and 3-digit numbers in this step. <br> Focus on the position of numbers and place value to subtract 2 digits from 3 digits using the column method. <br> Add two 3-digit numbers with no exchange. They should focus on the lining up. <br> Add 3-digit numbers with an exchange. <br> understand that there are different methods of subtraction. They need to explore efficient strategies for subtraction, including: <br> Counting on number lines <br> Near subtraction <br> Number bonds <br> Explore column subtraction using concrete manipulatives. <br> Estimate answers to calculations. <br> Explore ways of checking to see if an answer is reasonable. |

Unit Skill and Knowledge Development
Mathematics
Primary Formal

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Summer <br> Explore finding half using shapes and sets of objects. <br> Find half of a small quantity. | Summer <br> Explore quarters, develop an understanding of equal parts. Find a quarter of a small quantity. | Spring <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. <br> Extend knowledge of the whole and halves to recognise quarters of shapes, objects, and quantities. <br> Find quarters of shapes, objects, and quantities. <br> 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. | Spring <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. | Spring <br> Understand the concept of a whole as being one object or one quantity. <br> Explore making and recognising equal and unequal parts. <br> Understand that halving is splitting a whole into two equal parts. Introduced to the language of numerator, denominator and what these represent. <br> Find a half of a set of objects or quantity. <br> Extend their knowledge of the whole and halves to recognise quarters of shapes, objects, and quantities. <br> Find quarters of shapes, objects, and quantities. <br> Summer <br> Apply understanding of fractions to finding thirds. <br> Find a third using practical resources. Understand the concept of a unit fraction by recognising it as one equal part of a whole. <br> Introduced to the non-unit fractions $2 / 3$ and $3 / 4$ for the first time. Explore the equivalence of two quarters and one half of the same whole. <br> Count in fractions from any number up to 10. | Spring <br> Look at whole shapes and quantities and see that when a fraction is equivalent to a whole, the numerator and denominator are the same. Explore what a tenth is. They recognise that tenths arise from dividing one whole into 10 equal parts. <br> Count up and down in tenths using different representations. <br> Introduced to tenths as decimals for the first time. <br> Use a number line to represent fractions beyond one whole. <br> Find a unit fraction of an amount by dividing an amount into equal groups. <br> Need to understand that the denominator of the fraction tells us how many equal parts the whole will be divided into. <br> Apply knowledge and understanding of fractions to solve problems in various contexts. <br> Summer <br> Begin by using Cuisenaire or number rods to investigate and record equivalent fractions. Use Cuisenaire rods and paper strips alongside number lines to deepen their understanding of equivalent fractions. <br> Use proportional reasoning to link pictorial images with abstract methods to find equivalent fractions. <br> Compare unit fractions or fractions with the same denominator. <br> Order unit fractions and fractions with the same denominator. <br> Use practical equipment and pictorial representations to add two or more fractions with the same denominator where the total is less than 1. <br> Use practical equipment and pictorial representations to subtract fractions with the same denominator within one whole. |


| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
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|  | Summer <br> Build upon previous knowledge of counting in 2's beyond 20 and up to 50. <br> Build upon previous knowledge of counting in 5 's beyond 20 and up to 50. <br> Count in groups of tens. <br> Begin using stories to link pictures and concrete manipulative to explore making equal groups. | Summer <br> Use equal groups to find a total, focussing on 2's, 5's, 10's. <br> Begin to make arrays baby making equal groups. <br> Explore doubling with numbers up to 20. <br> Make groups of equal amounts starting with a given total. Sharing as a model of division. | 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. Expose to numerals and words for multiple representations. Begin to relate the connecting of equal groups to repeated addition. Introduce the $x$ symbol. Use the multiplication symbol and work out the total from pictures. Explore arrays to see the commutativity of multiplication facts e.g., $5 \times 2=2 \times 5$. <br> Explore doubling with numbers up to 20. | Spring <br> Explore sharing as a model of division. Use 1:1 correspondence to share concrete objects into equal groups. <br> Divide by sharing objects into equal groups using one-to-one correspondence. 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 . | Autumn <br> Recap their understanding of recognising, making, and adding equal groups. <br> Introduced to the multiplication symbol. Interpret mathematical stories and create own involving multiplication. <br> Explore arrays to see the commutativity of multiplication facts. <br> 2 times table. Count in $2 s$ using practical resources, exploring equal groups of 2. <br> 5 times table. Count in 5 s using practical resources, exploring groups of 5 . <br> Make equal groups by sharing objects into equal groups using one to one correspondence. Move onto pictorial representations. Be introduced to the division symbol. Divide objects into equal groups and count to find total numbers. Notice the link between division and multiplication and repeated addition. <br> Spring <br> Divide by 2, secure <br> representation of the abstract number using the division and equals symbols. <br> Use grouping and sharing to divide by 5 . Knowledge of the 5 times table will help. <br> Use the 10 timetable to support division by 10. Use grouping and sharing to do this. <br> Use knowledge of counting in 3 to multiply by 3 . <br> Explore division by 3 becoming more fluent in the 3 times table. Use knowledge of counting in 4 to multiply by 4 . <br> Explore division by 4 becoming more fluent in the 4 times table. | Autumn <br> Start to multiply by 8 , understanding that each multiple of eight is double is equivalent multiple of four. <br> Explore dividing by 8 through sharing into eight equal groups and grouping in eight. Multiplication facts for two, 3, four and five times tables along with the distributive law in Order to calculate unknown multiplication facts. <br> Use concept of multiplication to apply this to multiplication tables. <br> Multiplication tables (2, 3, 5 and 10 times tables) and understanding of key concepts of multiplication to develop knowledge of the 4 times table. <br> Multiplication facts for 2, 3, 4 and 5 times tables along with the distributive law in order to calculate unknown multiplication facts. <br> Multiplication and division facts to compare statements using inequality symbols. <br> Multiplication facts to solve other <br> multiplication problems. <br> Repeated addition to represent a two-digit number multiplied by a one-digit number with concrete manipulatives. <br> Repeated addition to represent a two-digit number multiplied by a one-digit number with concrete manipulatives. <br> Spring <br> Divide 2-digit numbers by a 1-digit number <br> by partitioning into tens and ones and sharing into equal groups. <br> Divide 2-digit numbers by a 1-digit number <br> by partitioning into tens and ones and sharing into equal groups. <br> Solve division problems with a remainder. <br> Expose to problems involving scaling. <br> List systematically the possible combinations resulting from two groups of objects. |


| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
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|  | Autumn <br> Sort objects by characteristic. Counting objects one at a time up to 10 , understand the last number is the total amount. <br> Using objects as representation, the use of zero is important. <br> Continue a number sequence forwards. <br> Continue a number sequence backwards. <br> Explore the language of one more and one less. Relate these two terms and understand they are opposite. <br> Match one object to another, explore situations where there are too many or not enough. <br> Use language equal to, more, less, greater than, fewer, and less than to compare groups of objects. <br> Introduce <, > and =. <br> Use previous knowledge to choose an efficient method to compare numbers. <br> Spring <br> Order up to three groups of objects. <br> Order numbers from smallest to greatest or greatest to smallest. <br> Explore ordinal numbers as positional. <br> Use a number line to count to 10. Introduce numbers 11-20. <br> Use pictorial representations to explore numbers 11-20. <br> Summer <br> Numbers from 11to 19 has a one and another number. Apply counting skills to find one more and one less up to 20. Compare <br> numbers greater than 10 up to 20 . | Autumn <br> Order up to three groups using objects within 20. <br> Order abstract digits from 0-20. <br> Count forwards and backwards within 50. <br> Use practical equipment to represent numbers to 50 . <br> Build understanding of tens and ones, grouping tens. <br> Represent 50 with various materials. <br> Identify one more and one less within numbers to 50 . <br> Compare two sets objects of numbers using <=> within 50 . <br> Compare practical objects up to <br> 50. <br> Order numbers up to 50 using language largest, smallest, more than, less than, least, most and equal to. <br> Spring <br> Count in 2 's up to 20 and 50. <br> Count in 5s'sup to 20 and 50. <br> Introduce the hundred square and use it to count forwards and backwards to 100. <br> Grouping in 10's to identify how many tens and ones are within a number. <br> Summer <br> Compare numbers within 100. Order numbers up to 50 using language largest, smallest, more than, less than, least, most and equal to <=>. <br> Order sets of objects and numbers from smallest to largest and largest to smallest within 100. Find one more and one less within 100. | Autumn <br> Introduced to number 11-20 to count forwards and backwards within 20. <br> Counting in 10's to 20. <br> Count forwards and backwards within 50. <br> Count in tens and ones to 50. Compare two amounts of objects within 50. <br> Count objects to 100 represented in numerals and word. <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. | Autumn <br> Continue to use a part-whole model to explore how tens and ones can be partitioned and recombined to make a total. <br> Use a place value chart to aid understanding of place value. 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. Add 10 more or subtract 10 from numbers within 100. Order numbers from smallest to greatest or greatest to smallest. Build on previous knowledge of counting in multiples of two and go beyond 20 u to 50. <br> 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. | Autumn <br> Represent numbers to 100 using a range of concrete materials. state how a number is made up. <br> Use whole-part model to explore 10 s and 1 s . Use the addition symbol to express numbers to 100. <br> Explore 100, ten tens make 100 and 100 ones make 100. Count objects to 100. Count in 100s to 1000. <br> Represent numbers to 1000. Use base 10 to become familiar with any number up to 1000 . Use columns for zeroes. <br> Understand 3-digit number is made up of $100 \mathrm{~s}, 10$ s and 1s. Read numbers shown in different representations. <br> Represent different numbers using place value counters showing how numbers are made. Understand the hundreds counter is worth more than tens and tens are worth more than ones. | Autumn <br> Estimate, work out and write numbers on a number line. Move on to finding 10 and 100 more or less than a given a number. Use objects to represent numbers to 1000. <br> Compare numbers presented as numerals rather than objects. Explore ordering a set of numbers from smallest to greatest and greatest to smallest. <br> Use their knowledge of the patterns in the 5 times table to count in steps of 50. |


| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
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|  | Autumn <br> Identify basic 2D shapes such as triangle, square and circle. <br> Group or sort shapes according to simple properties. <br> Summer <br> Describe turns using language full, half, quarter and three quarter. | Autumn <br> Name simple 3D shapes: cuboids, cubes, cylinders, pyramids, cones, and spheres. <br> Group or sort 3D shapes according to simple properties. <br> Use 2D and 3D shapes to complete and make simple patterns focussing on shape, size, and colour. <br> Summer <br> Use left, right, forwards and backwards to describe position and direction. <br> Describe position using top, in between, bottom, above and below | Spring <br> Recognise 2-D shapes by name, recognise 2-D shapes are flat. Count sides of 2-D shapes developing strategies to be able to do this. <br> Introduce vertex and vertices. Create own 2-D shapes and name them. <br> Introduced to the concept of vertical lines of symmetry. Recognise and sort 2-D shapes including circle, square, triangle, rectangle, pentagon, hexagon, and octagon using a range of different orientations. <br> 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. 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'. | Spring <br> Use knowledge of the properties of 2-D shapes to create patterns. 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. <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. <br> Use knowledge of the properties of 3-D shapes to create patterns. <br> Summer <br> Use knowledge of movement and turns to describe and record directions. <br> Build on previous knowledge of patterns and repeating patterns. | Summer <br> Recognise angles as a measure of a turn. They practice making 12,14 , 34 and whole turns from different starting points in both clockwise and anti-clockwise directions in practical contexts. <br> Recognise that a right angle is a quarter turn, 2 right angles make a half-turn, 3 right angles make three-quarters of a turn, and 4 right angles make a complete turn. Identify whether an angle is greater than or less than a right angle in shapes and turns, by measuring, comparing, and reasoning in practical contexts. Measure and draw straight lines accurately in centimetres and millimetres. <br> Identify and find horizontal and vertical lines in a range of contexts. | Summer <br> Children identify and find parallel and perpendicular lines in a range of practical contexts. They use the arrow notation to represent parallel lines and the right-angle notation for perpendicular lines. Recognise, describe, and draw 2-D shapes accurately. They use properties including types of angles, lines, symmetry, and lengths of sides to describe the shape. <br> Recognise and describe 3-D shapes in different orientations. They use properties including the number of faces, edges, and vertices to describe the shape. <br> Make 3-D shapes (cubes, cuboids, prisms, cylinders, pyramids, cones, spheres) using construction materials. |

## Unit Skill and Knowledge Development

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
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|  | Spring <br> Understand the language of length such as long, longer, short, shorter, tall, taller. | Spring <br> Use non-standard units such as cubes, hands, and straws to measure length and height. Explore measurement using a ruler. | Summer <br> Understand the language of long, longer, short, and shorter by comparing lengths and height. Use nonstandard units to measure length and height. <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. Order more than two lengths from shortest to longest and vice versa. Draw on their skills of the four operations and apply their understanding to length. | Spring <br> Introduced to millimetres building on understanding of centimetres and metres. use different measuring equipment including rulers, tape measures, metre sticks and trundle wheels. Begin to measure larger objects using metres. Use the most appropriate equipment to measure with depending on length. Recognise that 100 cm is equivalent to 1 metre. Explore equivalent lengths in metres and cm . Recognise that 10 mm is equivalent to 1 cm . Explore equivalent lengths in cm and mm . <br> Compare lengths of objects using comparison language and symbols. Compare and order lengths based on measurements in $\mathrm{mm}, \mathrm{cm}$ and m . | Spring <br> Add lengths given in different units of measurement. They convert measurements to the same unit of length to add more efficiently. <br> Use take-away and finding the difference to subtract lengths. Introduced to perimeter for the first time. <br> Use understanding of the properties of shape to calculate the perimeter of simple 2-D shapes. |

## Unit Skill and Knowledge Development

Mathematics
Primary Formal

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
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|  | Summer <br> Recognise and know the value of different coins. | Summer <br> Identify different notes and know the value of them. <br> Count money in 2's, 5's and 10's. | Autumn <br> Recognise and know the value of different coins. <br> Recognise and know the value of different notes. <br> Count coins in pence. <br> Count coins and notes in pounds. Count money coins and notes by bringing pounds and pence together. <br> Select coins to make a stated amount. | Autumn <br> Explore different ways of making the same amount. Compare two different values in either pounds or pence using greater than and less than. <br> Build on their knowledge of addition to add money including: 2digit 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> Find change from a given amount. Draw together all the skills they have used in this block and consolidate their previous addition and subtraction learning. | Spring <br> Be introduced to the $£$ and $p$ symbols, count in $1 p, 2 p, 5 p$, and $10 p$ coins. Use related facts to count in 20p coins. <br> Count in £1, £2, £5, £10 and £20s. <br> Understand the value of coins and notes, showing how money can represent in different ways. Convert between pounds and pence using the knowledge that $£ 1$ is 100 pence. | Spring <br> Add two amounts of money using pictorial representations to support them. <br> Use different methods to subtract money. <br> Use a number line and a part-whole model to subtract to find change. |


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| HALLMOOR SCHOOL |  |  | Primary Formal |  |  |  |
| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
|  | Summer <br> Introduce the word time and use before and after to describe, sort, and order events. <br> Days of the week, introduce vocabulary today, yesterday, and tomorrow. <br> Explore months of the year as specific key dates such as birthdays. <br> Introduce time to the hour. | Summer <br> Time to half an hour. <br> Explore the difference between seconds, minutes, and hours. Comparing time, faster, slower, earlier, and later. | Summer <br> Introduced to telling the time to the hour using an analogue clock. Telling the time to half an hour. Read and write times from clocks. Read and draw the times 'quarter to' and 'quarter past'. | Summer <br> Read and show analogue time to 5minute intervals. <br> Explore the difference between seconds, minutes, and hours. 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'. | Summer <br> Recap previous objective of telling the time to the hour and half past the hour. <br> Read and draw the times 'quarter to' and 'quarter past'. <br> Look at the concept of years and months. Introduced to leap years and how they are different from a non-leap year. <br> Recap the number of hours in a day and are introduced to language such as 'noon', 'midday', 'midnight'. Tell the time to the nearest 5 minutes on an analogue clock. Tell time to the nearest minute using an analogue clock. | Summer <br> Use 'morning', 'afternoon', 'a.m.' and 'p.m.' to describe the time of day. <br> Introduce to telling the time on a 24-hour digital clock for the first time. <br> Find the durations of events using both analogue and digital clocks. Compare durations of time using analogue and digital clocks. <br> Find start and end times to the nearest minute using both analogue and digital times. <br> Measure and compare durations of time in seconds. |

## Unit Skill and Knowledge Development

Mathematics

## Primary Formal

| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measurement: Weight, Volume, Mass, Capacity and Temperature | Spring <br> Introduce weight and mass, heavy and light. <br> Describe objects as heavy, light, heavier than, lighter than before using scales to check. <br> Use non-standard units to measure mass of an object. <br> Understand when the scale is balanced the number of nonstandard units can be used to determine the mass. <br> Use balance scales to compare two objects, using language such as heavier, lighter, and equal to. | Spring <br> Introduce volume and capacity. Measure capacity using different types of containers. Compare capacity of different containers using non-standard units, use more, less, equal words to describe. | Summer <br> Introduced to weight and mass for the first time. <br> Begin by using a variety of nonstandard units (e.g., cubes, bricks) to measure the mass of an object. Recap by comparing the mass of different objects. Continue to use balance scales before moving on to use standard weighing scales. Use knowledge of measuring mass in grams to start to measure mass in kilograms. Introduced to volume and capacity for the first time. Measure the capacity of different containers using non-standard units of measure. | Summer <br> Compare the volume of containers using <, > and =. Introduced to standard units of millilitres ( ml ) for the first time. <br> Introduced to litres (I) as a standard unit for the first time. Introduced to temperature, thermometers, and the units 'degrees Centigrade', written ${ }^{\circ} \mathrm{C}$ for the first time. | Summer <br> Recap on previous learning by comparing the mass of different objects. <br> Learn how to read a range of scales to measure mass, including scales with missing intervals. <br> Measure the mass of objects and record them as a mixed measurement in kilograms and grams. <br> Build on previous knowledge and use 'lighter' and 'heavier' to compare mass. <br> Add and subtract mass. They use a range of mental and written methods, choosing the most efficient one for each question. | Summer <br> Compare the volume of containers using <, > and =. <br> Use litres, millilitres and standard scales to explore capacity. <br> Continue to build on previous learning and use 'full' and 'empty' to compare capacity. <br> Add and subtract volumes and capacities. They can apply their understanding of different methods such as column addition/subtraction, finding the difference etc. <br> Introduce temperature, thermometers, and the units 'degrees Centigrade', written ${ }^{\circ} \mathrm{C}$ for the first time. |


| Unit | Planning Year 1 | Planning Year 2 | Planning Year 3 | Planning Year 4 | Planning Year 5 | Planning Year 6 |
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| $\begin{aligned} & \stackrel{y}{\hbar} \\ & \vdots \\ & \vdots \\ & \vdots \\ & \vdots \end{aligned}$ |  |  | Spring <br> Introduced to tally charts as a systematic method of recording data. <br> Draw pictograms using tally charts. Use knowledge of one-to-one correspondence to help them interpret and answer questions about the data presented in pictograms. | Spring <br> Draw pictograms where the symbols represent 2,5 or 10 items. Collect 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. | Spring <br> Introduced to tally charts as a systematic way for recording data. Draw pictograms where the symbols represent 2,5 or 10 items. Collect own data. <br> Interpret pictograms (2,5 and 10). Children also need to be able to halve 2 and 10. | Spring <br> Build on their understanding of pictograms from previous learning. They continue to read and interpret information to answer questions about the data. Interpret information in pictograms and tally charts to construct bar charts. <br> Interpret information from tables to answer one and two-step problems. |

