

## Maths Curriculum overviem

## SY 2022-23

At Deanshanger Primary School we follow the White Rose Curriculum which links, to the National Curriculum. This document shoms, hom maths progresses, through the different maths areas across, the year groups. The Reception year's curriculum is in a separate table at the beginning of this overviem document.

In each of the major areas (Number, Measurement, Geometry and Statistics), the curriculum has been broken down into key areas. Fon each of these areas, you can then see which National Curriculum objectives, are covered along with the term and block number in which that objective is finst met on the White Rose Maths schemes.

At Deanshanger Primary School we also promote the use of the following apps to be used in school and at home:

- Numbots for Reception, Year One and Year Twa- supporting the learning of Number, Addition and Subtraction.
- TT Rockstans from Years, Two to Sixr supporting the learning of Multiplication and Divisior.


## Reception Year Mathematics at Deanshanger School

| Mathematics (Number and Numerical Pattern) | EYFS Statutory Educational Programme: Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10 , the relationships between them and the pattems within those numbers. <br> By providing frequent and varied opportunities to build and apply this undenstanding - such as using manipulatives, including small pebbles and tens frames for organising counting - childrer will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space, and measures. It is important that childnen develop positive attitudes and interests in mathematics, look for pattems and relationships, spot connections, 'have a go', talk to adults and peers s about what they notice and not be afroid to make mistakes. |  |  |  |  |
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|  |  | Alive in 5: WRM <br> *Counting I-5 ext I-IO. <br> * Using 5 frames/IO frames. <br> *Looking at hom many altogether. <br> -Taking amay-one less. <br> *Composition of 5. <br> *Writing numbers to 5showing one less using symbots. <br> *Rolling number song- 2, 5, \|O's. <br> Alive in 5: WRM | Building 9 and IO: WRM <br> *Making 9 and 10 . <br> *Representing 9 and 10 in different mays. <br> * Using IO frames and representing hom many. <br> *Matching numerals and amounts. <br> *Ordering numbers to 10 some children may be able to go beyond 10 . <br> *Rolling number song- 2, <br> 5, IO's. <br> Building 9 and IO: WRM | To. 20 and beyond: WRM <br> *Number patterns to 20. <br> *Making numbers to 20using ten frames. <br> *Matching objects and pumerals. <br> *Counting-hom many. <br> *Beyond 20- what comes next- using ten frameshom many do I need? <br> *Estimating different amounts., <br> *Writing different amounts. <br> To. 20 and beyond: WRM | Find my pattern- <br> Doubling: WRM <br> *Doubling numbers. <br> *Looking at pairs. <br> * Use of dice for doubling. <br> *Counting how many. <br> *Making a matching pair. <br> *Domino game. <br> *Addition sentences- $1+1,2+2$ etc. <br> Find my patterr- Sharing: WRM <br> *Sharing different amounts. |




|  |  |  | *Making more than 8-how\|" many pairs can we make? <br> *Looking at hom many altogether. <br> *Making number sentences. <br> Length and heighttime/days of the week: <br> WRM <br> *Comparing lengthr look at whole class heights- who is taller? Hom do you know? Who is the tallest? <br> *Introducing different units of measure. | *Recapping repeating patterns. <br> Spring consolidation: <br> WRM <br> *Exploring number composition- 1-10-making numbers in different mays. <br> *Number bonds, to 5 (composition link). <br> *One more and one lessusing addition and subtraction simple sentences. <br> *Some capacity linksstory book link. <br> To 20 and beyond: WRM <br> *Rolling number song- 2 , <br> 5, 10 's. <br> *Weighing the ingredients using the digital scales. <br> *Number patterns, to 20. <br> *Matching numbers and numerals. |  | *Patterns- Repeating patterns. <br> *Relationships between numbers. <br> *Counting, hom manyMatching the correct number of animads/creatures to each family group. <br> *Shape patterns. <br> On the move: WRM <br> *Spatial reasoning. <br> *Completing an obstacle course. <br> *Number bonds to 5 and IO- using bomls and teddies. (part whole models). <br> *Using shapes, to develop spatial reasoning. <br> *Making our own mapsgetting to schook. <br> Consolidation: WRM <br> *Recap number bonds to 10 . <br> *One more and one less. |
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|  |  |  |  | * Using ten framescounting how many. <br> *Estimating- how many. |  | *Writing numbers and matching correct number of objects. <br> *Shapes (recognition and shape pictures). <br> *Repeating patterns. <br> *Addition. <br> *Subtractior. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White Rose Maths | *Number and place valuenumbers to 5. <br> *Addition and subtraction sorting. <br> *Number and place valuecompaning groups. <br> *Addition and subtraction change within 5. <br> *Measurement- time. <br> WHITE ROSE \& NUMBER BLOCKS <br> Getting to knom you. <br> Just like me! | *Number and place valuenumbers to 5. <br> *Addition and subtraction sorting. <br> *Number and place valuecomparing groups. <br> *Addition and subtraction change within 5. <br> *Measurement- time. <br> WHITE ROSE \& NUMBER BLOCKS <br> It's ME I,2,3! <br> Light and Dark. Consolidation Numbers. | *Addition and subtraction numbers to 5. *Number andr place value- numbers to IO. *Addition and <br> subtraction- addition to 10 . <br> *Geometry- shape and space. <br> WHITE ROSE \& NUMBER BLOCKS <br> Alive in 5! <br> Growing 6,7,8. <br> Building 9 and 10 Numbers 5, 6, 7, 8,9 Money Time Shape Early doubling subitising. | *Addition and subtraction numbers to 5. *Number and place value- numbers to IO. *Addition and subtraction addition to 10 . *Geometry- shape and space. <br> WHITE ROSE \& NUMBER BLOCKS <br> Building 9 and 10 . Consolidation Numbers. <br> 7, 8, 9, 10 Halving Doubling Sharing subitising. | *Geometry- exploring patterns. *Addition and subtraction- change. <br> *Number and place valuenumbers to 20. <br> *Multiplication and division- numerical patterns. *Measurementmeasure. <br> WHITE ROSE \& NUMBER BLOCKS <br> To. 20 and beyond. <br> Finst then now. <br> Numbers $10,11,12,13,14$, I5 Money, time, shape | *Geometry- exploring patterns. *Addition and subtraction change. <br> *Number and place valuenumbers to 20. <br> *Multiplication and division- <br> tumerical patterns. <br> *Measurement-measure. <br> WHITE ROSE \& NUMBER BLOCKS <br> Find my pattern. <br> On the move. <br> Consolidation. <br> Numbers 16, 17, 18, 19, 20 <br> Money, time, shape Halving, doubling, sharing subitising. |


|  | Matching. Sorting \& Comparing Numbers 1, 2, 3,4,5 subitising Money Time Shape. | 4, 5, ,6,7,8 Money Time Shape subitising Early doubling. |  |  | Halving, doubling, sharing subitising. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Development <br> Matters, <br> (Possible age- <br> related statements) | 3-4 Years: <br> *Talk about and identify the patterns anound them. For example: stripes, on clothes, designs, on rugs and mallpaper. <br> * Use infarmal language like 'pointy', 'spotty', 'blobs', etc. <br> Extend and create $A B A B$ patterns - stick, leaf, stick, leaf. <br> *Notice and correct an erron in a repeating pattern. <br> *Begin to describe a sequence of events, real | 3-4 Years: <br> *Solve neal morld mathematical problems with numbers up to 5 . <br> *Select shapes appropriately: flat surfaces for building, a etriangulan prism for a roof, etc. <br> * Combine shapes to make nem ones - an arch, abiggen triangle, etc. <br> *Talk about and explone 2D and 3D shapes (for example, circles, rectangles, triangles, and cuboids) using informal and mathematical language: | *Count objects, actions, and sounds. <br> *Link the number symbol (numeral) with its cardinal number value. <br> *Understand the 'one more than/one less than' <br> relationship between consecutive numbers. <br> *Explore the composition of numbers to 10 . <br> *Compare length, weight, and capacity. <br> *Subitise. <br> *Compare numbers. | *Count objects, actions, and sounds. <br> *Link the number symbot (numeral) with its candinal number value. <br> *Compare numbers. <br> *Explore the composition of numbers to 10 . <br> *Select, notate, and manipulate shapes to develop spatial reasoning skills. <br> *- Compose and decompose shapes so that children recognise a shape can | *Count objects, actions, and sounds. <br> *Subitise. <br> *Count beyond ter. <br> *Compare numbers. <br> *Understand the 'one more than/one less than' relationship between consecutive numbers. <br> *Explore the composition of numbers to 10 . <br> *Automatically recall number bonds for numbers 0-5 and some to 10 . | *Count objects, actions, and sounds. <br> *Subitise. <br> *Count beyond ter. <br> *Compare numbers. <br> *Understand the 'one more than/one less than' relationship between consecutive numbers. <br> *Explore the composition of numbers to 10 . <br> *Automatically recall number bonds for numbers, 0-5 and some to 10 . |




Early Years Scheme- White Rose:


## Years, One to Six Mathematics at Deanshanger Primary School

|  | Year One | Year Two | Year Three | Year Four | Yean Fiwe | Year Six |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Place Value: <br> Counting | Count to and across 100, formands and backmands, beginning with 0 on I, on from any giver number. <br> Count numbers to 100 in numenals; count in multiples of twos, fives and tens. <br> Autumn 1 <br> Spring 1 <br> Spring 3 <br> Summer 4 | Count in steps of 2,3, and 5 from 0, and in tens from any number formand and backmand. <br> Autumn 1 | Count from 0 in multiples of $4,8,50$, and 100 ; find 10 on 100 more or less than a given number. <br> Autumn 1 | Count in multiples of 6,7,9,25 and 1000 . <br> Count backmands through zero- to include negative numbers. <br> Autumn 1 | Count formands on backmands in steps of powers of 10 for any giver number up to $1,000,000$. <br> Count formands and backmands with positive and negative whole numbers, including through zero: <br> Autumn 1 |  |
| Place Value: <br> Represent | Identify and represent numbers using objects and pictorial representations. <br> Read and write numbers from 100 in numenals. <br> Read and write numbers from I to 20 in numenals, and words. <br> Autumn 1 <br> Spring 1 <br> Spring 3 <br> Summer 4 | Read and write numbers toat least 100 in numerals, and in words. <br> Identify, represent and estimate numbers using different representations, including the number line. <br> Autumn 1 | Identify, represent and estimate numbers using different representations. <br> Read and write numbers up to. 1000 in numerals and in mords. <br> Autumn 1 | Identify, represent and estimate numbers using different representations. <br> Read Roman numerals to 100 (I to C) and know that over time, the numeral system changer to include the concept of zero- and place value. <br> Autumn 1 | Read, write (order and compane) numbers to at least $1,000,000$ and determine the walue of each digit. <br> Read Roman numenals to. $1000(M)$ and recognise years writterv in Roman numerals. <br> Autumn 1 | Read, write (order and compare) numbers up to. $10,000,000$ and determine the value of each digit. <br> Autumn 1 |


| Place Value: Use PV and Compare | Giver a number, identify one more and one less. <br> Autumn 1 <br> Spring 1 <br> Spring 3 <br> Summer 4 | Recognise the place value of each digit in a two-digit number (tens, ones). <br> Compare and order numbers from 0 up to 100; use $<,>$ and $=$ signs. <br> Autumn 1 | Recognise the place value of each digit in a threedigit number (hundreds, tens, ones). <br> Compare and onder numbers up to 1000 . <br> Autumn 1 | Find 1000 more on less than a givern number. <br> Recognise the place walue of each digit in a four-digit number (thousands, hundreds, tens, and ones). <br> Order and compare numbers beyond 1000 . <br> Autumn 1 | (Read, write), onder and compare numbers to at least $1,000,000$ and determine the value of each digit. <br> Autumn 1 | (Read, write), onder and compare numbers to at least $10,000,000$ and determine the walue of each digit. <br> Autumn 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Place Value: <br> Problems and <br> Rounding |  | Use place value and number facts to solve problems. <br> Autumn 1 | Solve number problems and practical problems involving these ideas. <br> Autumn 1 | Round any number to the nearest IO, 100 or 1000 . <br> Solve number and practical problems that innolve all of the above and with increasingly lange positive numbers. <br> Autumn 1 | Interpret negative numbers, in context. <br> Round any number up to 1,000,000 to the nearest IO, I00, $1000,10,000$, and 100,000. <br> Solve number problems and practical problems that invalue all of the above. <br> Autumn 1 | Round any whole number to a required degree of accuracy. <br> Use negative numbers in context, and calculate intervals across zero. <br> Solve number and practical problems that involve all of the above. <br> Autumn 1 |
| Addition and <br> Subtractions. <br> Recall, <br> Represent, Use | Read, write and interpret mathematical statements invaluing addition ( + ), subtraction ( - ) and equal ( $=$ signs. | Recall and use addition and subtraction facts to 20 gluently, and derive and use related facts up to 100. | Estimate the answer to a calculation and use the inverse operations to check answers. <br> Autumn 2 | Estimate and use inverse operations to check answers to a calculation. <br> Autumn 2 | Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. |  |


|  | Represent and use number bonds and related subtraction facts within 20. <br> Autumn 2 <br> Spring 2 | Shom that addition of twa numbers can be done in any order (commutative) and subtraction of one number from another cannot. <br> Recognise and use the inverse relationship between addition and subtraction and use this tocheck calculations and solve missing number problems. <br> Autumn 2 |  |  | Autumn 2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Addition \& Subtractions. Calculations | Add and subtract one-digit and two-digit numbers to. 20 , including zero. <br> Autumn 2 <br> Spring 2 | Add and subtract numbers, using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones. <br> a two-digit number and tens. <br> two two-digit numbers. adding three one-digit numbers. <br> Autumn 2 | Add and subtract numbers, mentally, including: <br> a three-digit number and ones. <br> a three-digit number and tens. <br> a three-digit number and hundreds. <br> Add and subtract numbers, with up to three digits, using formal written methods of columnan addition and subtraction, <br> Autumn 2 | Add and subtract numbers, with up to 4 digits using the formal writter methods of columnar addition and subtraction where appropriate. <br> Autumn 2 | Add and subtract whole numbers, with more than 4 digits, including using formal writter methods (columnar addition and subtraction). <br> Add and subtract numbers mentally with increasingly lange numbers. <br> Autumn 2 | Perform mental calculations, including with mixed operations and large numbers. <br> Use their knombedge of the onder of operations to carry out calculations involving the four operations. <br> Autumn 2 |


|  <br> Subtractions: <br> Solve Problems | Solve one-step problems that inuolve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=$ - - 9 <br> Autumn 2 <br> Spring 2 | Solve problems with addition and subtraction, using concrete objects and pictorial representations, including those involving numbers, quantities and measures. <br> Apply thein increasing knowledge of mental and writter methods, <br> Autumn 2 | Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtractions. <br> Autumn 2 | Solve addition and subtraction two-step problems in contexts, deciding which openations and methods to use and why. <br> Autumn 2 | Solve addition and subtraction multi-step problems in contexts, deciding which operations, and methods to use and why. <br> Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. <br> Autumn 2 | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. <br> Autumn 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  <br> Divisions <br> Recall, <br> Represent, Use |  | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recogrising odd and ever numbers. <br> Shom that multiplication of two numbers can be done in any order (commutative) and division of one number by another carnot. <br> Spring 2 | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. <br> Autumn 3 Spring 1 | Recall multiplication and division facts for multiplication tables up to. $\|2 x\| 2$. <br> Use place walue, known and derived facts, to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by I; multiplying together three numbers. <br> Recognise and use factor pairs and commutativity in mental calculations. | Identify multiples and factors, including finding all factor pains of a number, and common factors of factors of two. numbers. <br> Know and use the vocabulary of prime numbers, prime factors and composite (nor-prime) numbers. <br> Establish whether a number up to 100 is prime and recall prime numbers up to. 19. | Identify commor factors, commor multiples and prime numbers. <br> Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. <br> Autumn 2 |


|  |  |  | Autumn 4 Spring 1 | Recognise and use square numbers and cube numbers, and the notation for squared and cubed. <br> Autumn 3 <br> Spring 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  <br> Divisions <br> Calculations | Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication $(x)$, division (\%) and equals ( $(=)$ signs. <br> Spring 2 | Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for twa-digit numbers, times, one-digit numbers, using mental and progressing to. formal writter methods. <br> Autumn 3 <br> Spring 1 | Multiply two-digit and three-digit numbers by a one-digit number using formal mritter layout. <br> Spring 1 | Multiply numbers up to 4 digits by a one- on twodigit number using a formal writter method, including long multiplication for two-digit numbers. <br> Multiply and divide numbers mentally drawing upon known facts. <br> Divide numbers up to 4 digits by a one-digit number using the formal mritter method of short division and interpret remainders appropriately for the context. <br> Multiply and divide whole numbers and those inwalving decimals by 10 , 100 and 1000 . <br> Autumn 3 | Multiply multi-digit number up to 4 digits by a twodigit whote number using the formal writter method of long multiplication. <br> Divide numbers up to -4 digits by a two-digit whole number using the formal writter method of long division, and interpret remainders as whole number remainders, fractions, on by rounding, as appropriate for the context, <br> Divide numbers up to. 4 digits by a tma-digit number using the formal writter method of short division where appropriate, interpreting remoinders according to the context, Perform mental calculations, including with |


|  |  |  |  |  | Spring 1 | mixed openations and lange numbers. <br> Autumn 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiplication \& Division: Solve Problems | Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. <br> Summen 1 | Solve one-step problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. <br> Spring 2 | Solve problems, including missing number problems, irvolving multiplication and divisions, including positive integer scaling problems and correspondence problems in which $n$ objects are connected to $m$ objects. <br> Autumn 3 <br> Spring 1 | Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as $n$ objects are connected to $m$ objects. | Solve problems involving multiplication and division including using thein knowledge of factors and multiples, squares and cubes. <br> Solve problems involuing multiplication and division, including scaling by simple fractions and problems inwolving simple rates. <br> Auturn 3 Spring 1 | Solve problems inuolving addition, subtraction, multiplication and division. <br> Autumn 2 |
|  <br> Divisions: <br> Combined <br> Operations |  |  |  |  | Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. <br> Auturn 3 <br> Spring 1 | Use their knowledge of the onder of operations to carry out calculations involving the four operations. <br> Autumn 2 |
| Fractions: <br> Recognise and <br> Write | Recognise, find and name a half as one of two equal parts of an object, shape on quantity. | Recognise, find, name and write fractions $1 / 31 / 4,2 / 4$, and $3 / 4$ of a length, shape, set of objects on quantity. | Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts, and in dividing one-digit | Count up and down in hundredth; recogrise that hundredths arise wher dividing and object by one | Identify, name and write equivadent fractions of a giver, fraction, represented visually, including tenths and hundredths. |  |


|  | Recognise, find and name a quarter as one of four equal parts of an object, shape on quantity. <br> Summer 2 | Summer 1 | numbers on quantities by 10. <br> Recognise, find and write fractions of a discrete set of objects: unit fractions and now-unit fractions with small denominators. <br> Spring 3 | hundred and dividing tenths by tens. <br> Spring 3 | Recognise mixed numbers and impropen fractions and corvert from one form to. the other and write mathematical statements $>1$ as a mixed number. <br> Auturn 4 Spring 2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fractions: Compare |  | Recognise the equinalence of $2 / 4$ and $1 / 2$. <br> Summer 1 | Recognise and show, using diagrams, equivalent fractions with small denominators. <br> Compare and onder unit fraction, and fractions with the same denominators. | Recognise and show, using diagrams, families of commor equivalent fractions. <br> Spring 3 | Compare and onder fractions whose denominators are all multiples of the same number. <br> Auturn 4 Spring 2 | Use common factors, to simplify fractions; use common multiples to. express fractions in the same denomination. <br> Compare and order fractions, including fractions $>1$. <br> Autumn 3 <br> Autumn 4 |
| Fractions: <br> Calculations |  | Write simple fractions, for example $1 / 2$ of $6=3$ <br> Summer 1 | Add and subtract fractions, with the same denominator within one whole. <br> Summer 1 | Add and subtract fractions with the same denominator. <br> Spring 3 | Add and subtract fractions, with the same denominator and denominators that are multiples of the same number. <br> Multiple proper fractions and mixed numbers by whote numbers, supported by materials and diagnams. | Add and subtract fractions with different denominators and mixed numbers, using the concept of equinalent fractions. <br> Multiply simple pairs of proper fractions, writing the answer in its simplest form. |


|  |  |  | Autumn 4 Spring 2 | Divide proper fractions by whote numbers. <br> Autumn 3 <br> Autumn 4 |
| :---: | :---: | :---: | :---: | :---: |
| Fractions: Solve Problems | Solve problems that involve all of the above. <br> Spring 3 <br> Summer 1 | Solve problems involving increasingly hander fractions to calculate quantities, and fractions to divide quantities, including nonOunit fractions where the answer is a whole number. <br> Spring 3 |  |  |
| Decimals: <br> Recognise and <br> Write |  | Recognise and write decimal equinalents of any number of tenths on hundredths. <br> Recognise and write decimal equimalents to $1 / 4$, $1 / 2,3 / 4$ <br> Spring 4 <br> Summer 1 | Read and mrite decimal numbers as fractions. <br> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. <br> Spring 3 <br> Summer 3 | Identify the value of each digit in numbers given to three decimal places, <br> Spring 3 |
| Decimals: <br> Compare |  | Round decimals with one decimal place to nearest whole number: <br> Compare numbers with the same number of decimal | Round decimals with two. decimal places to the nearest whole number and to one decimal place. |  |





|  | Year One | Year Two | Year Three | Year Four | Year Five | Year Six |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measurement: <br> Using Measures | Compare, describe and solve practical problems fors <br> Lengths and heights, <br> Mass/meight <br> Capacity and volume Time <br> Measure and begin torecond the following: Lengths and heights Mass/meight | Choose and use appropriate standand units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass (kg/g); tempenature ( ${ }^{\circ} \mathrm{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers, and measuring vessels. | Measure, compare, add and subtract: lengths, ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); volume/capacity ( $(/ \mathrm{ml})$ ). <br> Spring 2 <br> Spring 4 | Convert between different units of measure. <br> Estimate, compare and calculate different measures. <br> Autumn 3 <br> Spring 2 <br> Summer 3 | Convert between different units of metric measure. <br> Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. <br> Use all four operations to solve problems inuolving | Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. <br> Use, read, write and convert between standand units, converting measurements of length, |


|  | Capacity and volume Time (hours, minutes, seconds). <br> Spring 4 <br> Spring 5 <br> Summer 6 | Compare and order lengths, mass, volume/capacity and recond the results using > < and $=$. <br> Spring 3 <br> Spring 4 |  |  | measure using decimal notation, including scaling. <br> Summer 5 | mass, volume and time from a smaller unit of measure to a langer unit, and wice versa, using decimal notation to up to three decimal places. <br> Convert between miles and killometres. <br> Spring 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measurement: <br> Money | Recognise and know the value of different denominations of coins and notes. <br> Summer 5 | Recognise and use symbols, for pounds (£) and pence (p); combine amounts to make a particular value. <br> Find different combinations of coins that equal the same amounts of money. <br> Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. <br> Spring 1 | Add and subtract amounts of money to give change, using both £ and p in practical contexts. <br> Summer 2 | Estimate, compare and calculate different measures, including money in pounds and pence. <br> Summer 2 | Use all four operations to solve problems inuolving measure (money). |  |
| Measurement: Time | Sequence events in chronological onder using language (before, after, next, first, today, yestenday, | Compare and sequence interval of time. <br> Tell and write the time to five minutes, including | Tell and write the time from ar analogue clock, including using Roman numerals from I to XII, | Read, write and convert time between analogue and digital I2and 24-hour docks. | Solve problem involving corwerting betweer units of time. | Use, read, write and corvert betweer standand units, corverting measurements of time from a smaller unit of measure |


|  | tomorrow, moming, aftemoon and evening) <br> Recogrise and use language relating to dates, including days of the week, weeks, months and years. <br> Tell the time to the hour and half past the hour and draw the hands or a clock face to shom these times. <br> Summer 6 | quarter pastto the hour and draw hands or a clock face to show these times. <br> Know the number of minutes in an hour and the number in a day. <br> Summer 2 | and 12 -hour and 24-hour clocks. <br> Estimate and read time with increasing accuracy to the nearest minute; recond and compare time in terms, of seconds, minutes and hours; use vocabulary such as o'clock, a.mu/p.m., morning, afternoor, noon and midnights. <br> Know the number of seconds in a minute and the number of days in each month, year and leap year. <br> Compare durations of events. <br> Summer 3 | Solve problems inudving converting from hours to minutes; minutes to seconds; years to months; weeks to days. <br> Summer 3 |  | to a larger unit, and vice versa. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measurement: <br> Penimeter, Area, <br> Volume |  |  | Measure the perimeter of simple 2-D shapes. <br> Spring 2 <br> Spring 4 | Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. <br> Find the area of rectilinear shapes by counting squares. <br> Autumn 3 <br> Spring 2 | Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. <br> Calculate and compare the area of rectangles (including squares), and including using standand units, square centimetres (am2) and square metres | Recognise that shapes with the same area can have different perimeter and vice versa. <br> Recognise when it is possible to use formulae for area and volume of shapes. <br> Calculate the area of parallelograms and triangles. |



|  | Year One | Year Two | Year Three | Year Four | Yean Five | Year Six |
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| Geometry: 2-D Shapes | Recogrise and name commor 2-D shapes, for example, rectangles (including squares), circles, and triangles. <br> Autumn 3 | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. <br> Identify 2-D shapes on the surface of 3-D shapes. <br> Compare and sort commor 2-D shapes and everyday objects. <br> Auturn 3 | Dram 2-D shapes. <br> Summer 4 | Compare and classify geometric shapes, including quadrilaterals and triangles, based on thein properties and sizes. Identify lines of symmetry in 2-D shapes presented in different orientations. <br> Summer 5 | Distinguish between regular and iregular polygans based on reasoning about equal sides and angles. <br> Use the properties of rectangles to deduce related facts and find missing lengths and angles. <br> Summer 1 | Draw 2-D shapes using giver dimensions and angles. <br> Compare and classify geometric shapes based on their properties and sizes. |
| Geometry: 3-D Shapes | Recognise and name common 3-D shapes. Including cuboids, cubes, pyramids and spheres. | Recogrise and name common 3-D shapes. | Make 3-D shapes using modelling materials. |  | Identify 3-D shapes from <br> 2-D representations. <br> Summer 1 | Recognise, describe and build 3D shapes, including nets. |


|  | Autumn 3 | Compare and sort commor 3-D shapes and everyday objects. <br> Autumn 3 | Recognise 3-D shapes in different orientations and describe them. <br> Summer 4 |  |  | Summer 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Geometry: <br> Angles \& Lines |  |  | Recognise angles as a property of shape or a description of a turn. <br> Identify right angles, recognise that two night angles make a half turn, three make three quarters of a turn and four a complete turn. <br> Identify whether angles are greater than one less than a night angle. <br> Identify horizontal and vertical lines and pains of perpendicular and parallel lines. <br> Summer 4 | Identify acute and obtuse angles and compare and onder angles up to two. right angles by size. <br> Identify lines of symmetry in 2-D shapes presented in different orientations. <br> Complete a simple symmetric figure with respect to a specific line of symmetry. <br> Summer 5 | Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. <br> Draw given angles, and measure them in degrees. <br> Identify: <br> - angles at a point and one whole turn (total 360). - angles at a point or a straight line and $1 / 2$ a turn (total $180^{\circ}$ ). <br> -other multiples of $90^{\circ}$. <br> Summer 1 | Find unknowir angles in any triangles, <br> quadrilaterals, and regulan polygons. <br> Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. <br> Summer 1 |
| Geometry: <br> Position and <br> Direction | Describe position, direction and movement, including whole, half, quarter and three-quarter turns. <br> Summer 3 | Onder and arrange combinations of mathematical objects in patterns and sequences. <br> Use mathematical vocabulary to describe |  | Describe positions or a 2-D grid as coondinates in the first quadrant. <br> Describe movements between positions as translations of a giver unit | Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. | Describe positions on the full coordinate grid (all four quadrants). <br> Draw and translate simple shapes on the coordinate |



|  | Year One | Year Two | Year Three | Year Foun | Yean Five | Year Six |
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| Statistics: <br> Present and <br> Interpret |  | Interpret and construct simple pictograms, tally charts, block diagnams and simple tables. <br> Summer 3 | Interpret and present data using bar charts, pictograms and tables. <br> Summer 5 | Interpret and present discrete and contiruous, data using appropriate graphical methods, including bar chants and time graphs. <br> Summer 6 | Complete, read and interperet information in tables, including timetables. <br> Spring 5 | Interpret and construct pie charts and line graphs and use these to solve problems. <br> Spring 6 |
|  |  | Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. <br> Ask and answer questions about totalling and comparing categorical data, <br> Summer 3 | Solve one-step and twastep questions using information presented in scaled bar charts and pictograms and tables. <br> Summer 5 | Solve comparison, sum and difference problems using information presented in ban charts, pictograms, tables and other graphs. <br> Summer 6 | Solve comparison, sum and difference problems using information presented in a line graphu <br> Spring 5 | Calculate and interpret the mean as an average. <br> Spring 6 |






|  | Week 1 | Week 2 Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
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|  | Geomerry |  | Geomerty |  | Number |  |  |  | Measure |  |  |
|  | Shape |  | Position <br> and <br> direction |  | Decimals |  |  |  | Conv units |  |  |
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## Year 6 Scheme (WR 3.0):



