## The Piggott School: Charvil Primary


'Go and do Likewise' Luke 10:25, -37 The Parable of the Good Samaritan We live with love and compassion, seeking help in times of need

## Curriculum Map: Maths Year

Long Term Plan

| Autumn | Spring | Summer |
| :---: | :---: | :---: |
| Investigating Number Systems | Reasoning with Measures | Visualising Shape |
| Pattern Sniffing | Discovering Equivalence | Exploring Change |
| Solving Calculation Problems | Reasoning and Fractions | Describing Position |
| Generalising Arithmetic | Solving Number Problems |  |
| Exploring Shape | Investigating Statistics | Measuring and Estimating |

Content Declarative Knowledge 'I know’ and Skills Procedural Knowledge ‘I know how to’

| Number |  |  |  | Measurement | Geometry |  | Statistics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Place Value | Addition and Subtraction | Mulitplication and Division | Fractions, Decimals \& Percentages |  | Properties of Shapes | Position \& Direction |  |
| count in steps of 2, 3 , and 5 from 0 , and in tens from any number, forward and backward | solve problems with addition and subtraction: <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures | recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | recognise, find, name and write fractions $1 / 3,1 / 4$, $2 / 4$ and $3 / 4$ of a length, shape, set of objects or quantity | choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass (kg/g); temperature ( ${ }^{\circ} \mathrm{C}$ ); capacity (litres/ml) to the nearest | identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line | order and arrange combinations of mathematical objects in patterns and sequences | interpret and construct simple pictograms, tally charts, block diagrams and simple tables |


|  | - applying their increasing knowledge of mental and written methods |  |  | appropriate unit, using rulers, scales, thermometers and measuring vessels |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| recognise the place value of each digit in a two-digit number (tens, ones) | recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 | calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs | write simple fractions for example, $1 / 2$ of $6=3$ and recognise the equivalence of $2 / 4$ and $1 / 2$ | compare and order lengths, mass, volume/capacity and record the results using >, < and = | identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces | use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise) | ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity |
| identify, represent and estimate numbers using different representations, including the number line | add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and ones - a two-digit number and tens - two two-digit numbers | show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot |  | recognise and use symbols for pounds ( $£$ ) and pence (p); combine amounts to make a particular value | identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] |  | ask and answer questions about totalling and comparing categorical data |




Vocabulary

| Number and place value | Measure | Geometry (position and direction) | Geometry (properties of shape) | Fractions | Data/statistics | General/problem solving |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Numbers to one hundred <br> Hundreds <br> Partition, recombine <br> Hundred more/less | Quarter past/to $\mathrm{m} / \mathrm{km}, \mathrm{g} / \mathrm{kg}, \mathrm{ml} / \mathrm{l}$ <br> Temperature (degrees) | Rotation <br> Clockwise, anticlockwise <br> Straight line <br> Ninety degree turn, right angle | Size <br> Bigger, larger, smaller <br> Symmetrical, line of symmetry <br> Fold <br> Match <br> Mirror line, reflection <br> Pattern, repeating pattern | Three quarters, one third, a third <br> Equivalence, equivalent | Count, tally, sort <br> Vote <br> Graph, block graph, pictogram, <br> Represent <br> Group, set, list, table <br> Label, title <br> Most popular, most common, least popular, least common | Predict <br> Describe the pattern, describe the rule <br> Find, find all, find different <br> Investigate |

Vocabulary

| Number and place value | Addition and subtraction | Multiplication and division | Measure | Geometry (position and direction) | Geometry (properties of shape) | Fractions | General/problem solving |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Greater, lesser <br> Pair <br> Units, ones, tens <br> Ten more/less <br> Figure(s) <br> Compare <br> (In) order/a <br> different <br> order <br> Above, below | Number bonds Inverse <br> Near double <br> Difference between <br> How many fewer is...than..? How much less is..? | Once, twice, three times, five times <br> Count in tens (forwards from/ backwards from) <br> How many times? <br> Lots of, groups of <br> Multiple of, times, multiply, multiply by <br> Repeated addition <br> Array, row, column <br> Group in twos, threes, etc. <br> Equal groups of <br> Divided by, left, left over | Midnight <br> Now, soon, early, late <br> Quick, quicker, quickly, fast, slow, slower <br> Old, older, oldest, new, newer, newest <br> Takes longer, takes less time <br> Hour, o'clock, half past <br> Watch, hands <br> How long ago? <br> How long will it be to...? How long will it take to...? How often? <br> Always, never, often, sometimes, usually <br> Once, Twice... <br> First, second, third, etc | Position <br> Around <br> Opposite <br> Apart <br> Between, edge, centre <br> Corner <br> Direction <br> Journey <br> Left, right <br> Across <br> Near <br> Along <br> To, from <br> Movement <br> Whole turn, half turn <br> Stretch, bend | Group <br> Hollow <br> Point, pointed <br> Edge | Equal parts, four equal parts Two halves A quarter, two quarters | Place, fit <br> Arrange, rearrange <br> Change, change over <br> Split, separate <br> Carry on, continue, repeat <br> Choose, collect <br> Record, trace, copy, complete, finish, end <br> Fill in, shade, colour, tick, cross, draw, draw a line between, join (up), arrow <br> Answer, check same number(s)/different number(s)/missing number(s) <br> Number facts <br> Abacus, rods <br> Best way, another way <br> Scep |

