



## Numeracy Statement of Intent

The national curriculum for mathematics intends to ensure that all pupils:

1. Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
2. **Reason** mathematically by following a line of enquiry, **conjecturing** relationships and generalisations, and developing an argument, justification or **proof using mathematical language**.
3. Can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including **breaking down problems into a series of simpler steps** and persevering in seeking solutions.

At Whinstone Primary School we intend to:

1. Ensure our children have access to a high quality maths curriculum that is **challenging, enjoyable** and **builds upon prior knowledge**.
2. Provide our children with a variety of **mathematical opportunities**, which will enable them to **make connections** across a variety of **subjects and situations** - and which will serve them well in **life beyond school**.
3. Ensure children are **confident** mathematicians who are not afraid to **take risks, attempt new methods**, and **justify and reason their decision-making**.
4. Fully develop **independent learners with inquisitive minds** who have secure mathematical foundations and an **interest in self-improvement**.





## Numeracy Implementation

Numeracy is taught as an area of learning in its own right, as well as integrated with other curriculum areas where appropriate. There is also flexibility to seize opportunities to celebrate and acknowledge significant events.

Foundation Stage teach numeracy everyday - discretely - following the Early Learning goals and integrate it across the curriculum throughout the day. KS1 have 5 full sessions per week. KS2 have 5 full sessions per week plus 1 x 1 hour Schofield and Sims session on a Friday.

FS follow the Early Learning Goals; KS1 and KS2 all follow the order of FOCUS MATHS.

| <b>Year 2: Overview of the year</b>   |  |  |   |   |  |
|---------------------------------------|--|--|---|---|--|
| <b>Autumn 1</b>                       | <b>Autumn 2</b>  | <b>Spring 1</b>                                  | <b>Spring 2</b>                                     | <b>Summer 1</b>                                 | <b>Summer 2</b>                                      |
| 1 Place value                         | 1 Multiplication and Division<br>Multiplication tables | 3 Place value<br>Mental addition and subtraction | 2 Geometry<br>2D and 3D shape,<br>including sorting | 6 Multiplication and<br>Division                | 4 Place value (using<br>measures)                    |
| 1 Number and place<br>value           | 1 Multiplication & Division                            | 3 Number and place<br>value                      | 6 Measures<br>Length and<br>mass/weight             | 4 Number and place<br>value<br>(use statistics) | 9 Measures<br>Time                                   |
| 2 Number and place<br>value           | 1 Statistics   | 4 Measures<br>Capacity and Volume                | 3 Addition and<br>subtraction                       | 4 Addition and<br>subtraction                   | 4 Multiplication and<br>division                     |
| 1 Measures<br>Length &<br>mass/weight | 1 Fraction,  | 2 Geometry<br>2D and 3D shape                    | 2 Fractions   | 8 Measures<br>Capacity & Volume/<br>Temperature | 2 Statistics, including<br>finding the<br>difference |
| 1 Addition and<br>subtraction         | 2 Measures<br>Money                                    | 5 Measures<br>Money                              | 3 Geometry<br>Position and<br>Direction.            | 3 Fractions                                     | 10 Measures<br>Money                                 |
| 2 Addition and<br>subtraction         | 3 Measures<br>Time                                     | 2 Multiplication &<br>Division                   | 7 Measures<br>Time                                  | 4 Geometry<br>Position & Direction.             |  |



**Maths Vocabulary for Year 2**

| <b>Number and place value</b>  | <b>Measure</b>   | <b>Geometry (position and direction)</b>  | <b>Geometry (properties of shape)</b>  | <b>Fractions</b>   | <b>Data/statistics</b>   | <b>General/problem solving</b>   |
|--|--|---|--|--|--|--|
| <ul style="list-style-type: none"><li>• Numbers to one hundred</li><li>• Hundreds</li><li>• Partition, recombine</li><li>• Hundred more/less</li></ul> | <ul style="list-style-type: none"><li>• Quarter past/to</li><li>• m/km, g/kg, ml/l</li><li>• Temperature (degrees)</li></ul> | <ul style="list-style-type: none"><li>• Rotation</li><li>• Clockwise, anticlockwise</li><li>• Straight line</li><li>• Ninety degree turn, right angle</li></ul> | <ul style="list-style-type: none"><li>• Size</li><li>• Bigger, larger, smaller</li><li>• Symmetrical, line of symmetry</li><li>• Fold</li><li>• Match</li><li>• Mirror line, reflection</li><li>• Pattern, repeating pattern</li></ul> | <ul style="list-style-type: none"><li>• Three quarters, one third, a third</li><li>• Equivalence, equivalent</li></ul> | <ul style="list-style-type: none"><li>• Count, tally, sort</li><li>• Vote</li><li>• Graph, block graph, pictogram,</li><li>• Represent</li><li>• Group, set, list, table</li><li>• Label, title</li><li>• Most popular, most common, least popular, least common</li></ul> | <ul style="list-style-type: none"><li>• Predict</li><li>• Describe the pattern, describe the rule</li><li>• Find, find all, find different</li><li>• Investigate</li></ul> |



# Whinstone Primary School Year 2 Numeracy



## Impact

Teachers will regularly assess and will evaluate what knowledge and skills pupils have gained against expectations.

| 1 Below expectations | 2 Meeting expectations   | 3 Exceeding expectations |
|----------------------|--|--------------------------|
|                      | 2.1.a.1 Count in tens from any number, forward and backward  |                          |
|                      | 2.1.a.3 Count in steps of 2, 3, and 5 from 0, forward and backward   |                          |
|                      | 2.1.b.1 Recognise the place value of each digit in a two-digit number (tens, ones)   |                          |
|                      | 2.1.b.2 Read and write numbers to at least 100 in numerals and words   |                          |
|                      | 2.1.b.3 Identify, represent and estimate numbers to 100 using different representations, including the number line, and partitioning in different ways   |                          |
|                      | 2.1.b.4 Use place value and number facts to solve problems   |                          |
|                      | 2.1.c.1 Compare and order numbers from 0 up to 100; use <, > and = signs   |                          |
|                      | 2.2.a.1 Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot   |                          |
|                      | 2.2.a.3 Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot  |                          |
|                      | 2.2.b.1 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: two two-digit numbers and adding three one-digit numbers  |                          |
|                      | 2.2.c.1 Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods |                          |
|                      | 2.2.c.2 Recognise and use the inverse relationship between addition and subtraction to solve missing number problems   |                          |
|                      | 2.2.c.3 Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts  |                          |
|                      | 2.2.d.1 Recall addition and subtraction facts to 20 fluently, deriving related facts to 100  |                          |
|                      | 2.2.d.2 Recall multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers   |                          |
|                      | 2.2.e.2 Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs  |                          |
|                      | 2.3.a.1 Recognise, find, name and write fractions 1/3 and 1/4 of a length, shape, set of objects or quantity   |                          |
|                      | 2.3.a.2 Recognise, find, name and write fractions 2/4 and 3/4 of a length, shape, set of objects or quantity   |                          |



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| 1 Below expectations | 2 Meeting expectations  | 3 Exceeding expectations |
|----------------------|---|--------------------------|
|                      | 2.3.b.1 Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$  |                          |
|                      | 2.3.c.1 Write simple fractions  |                          |
|                      | 2.1.1 Compare and sequence intervals of time  |                          |
|                      | 2.1.2 Know the number of minutes in an hour and the number of hours in a day  |                          |
|                      | 2.1.3 Recognise and use symbols for pounds (£) and pence (p)  |                          |
|                      | 2.1.4 Compare and order measurements and record the results using $>$ , $<$ and $=$ as well as simple multiples   |                          |
|                      | 2.2.1 Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times  |                          |
|                      | 2.2.2 Record the time on an analogue clock in words   |                          |
|                      | 2.2.3 Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( $^{\circ}$ C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels |                          |
|                      | 2.3.2 Combine amounts of money to make a particular value including different combinations of coins that equal the same amount of money   |                          |
|                      | 2.3.3 Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change  |                          |
|                      | 2.1.2 Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]   |                          |
|                      | 2.2.2 Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line  |                          |
|                      | 2.2.3 Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces   |                          |
|                      | 2.4.1 Use mathematical vocabulary to describe position  |                          |
|                      | 2.4.2 Order and arrange combinations of mathematical objects in patterns and sequences  |                          |
|                      | 2.4.3 Use mathematical vocabulary to describe direction distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)   |                          |
|                      | 2.4.3 Use mathematical vocabulary to describe movement, including movement in a straight line   |                          |
|                      | 2.1.1 Interpret data from simple pictograms, tally charts, block diagrams and simple tables   |                          |
|                      | 2.1.2 Present data in simple tables, simple pictograms, tally charts and block diagrams   |                          |