

Numeracy Objectives – Year 2

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
<ul style="list-style-type: none"> ▪ count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ▪ count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens ▪ (previously 1-20) ▪ given a number, identify one more and one less ▪ read and write numbers from 1 to 20 in numerals and words. ▪ identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least 	<ul style="list-style-type: none"> ▪ solve problems with addition and subtraction: <ul style="list-style-type: none"> ▪ ***using concrete objects and pictorial representations, including those involving numbers, quantities and measures ▪ applying their increasing knowledge of mental and written methods ▪ recall and use addition and subtraction facts to 20 (previously just pairs that make 20 and facts to 10) fluently, and derive and use related facts up to 100 e.g. $3+7=10$ so $30+70=100$ ▪ show that addition of two numbers can be done in any order (commutative) e.g. $5+2+1= 2+1+5= 1+5+2=$ and subtraction of one number from another cannot ▪ recognise and use the inverse relationship between addition & subtraction and use this to check calculations and solve missing number problems. ▪ Extend understanding of language to include sum and difference ▪ Understand subtraction as taking away or finding the difference. ▪ add and subtract numbers **using concrete objects, pictorial representations, and mentally, (with number lines or jottings), including: <ul style="list-style-type: none"> ▪ a two-digit number & ones ▪ a two-digit number and tens ▪ two two-digit numbers ▪ adding three one-digit numbers ▪ Refer to VCP for methods. ▪ Finding small difference using number lines 	<ul style="list-style-type: none"> ▪ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. ▪ Use a variety of language to describe multiplication and division ▪ recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ▪ Doubling and halving numbers 1-20 ▪ Counting in 3s, 4s and 8s ▪ calculate mathematical statements for multiplication and division grouping within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs
		Time
<p data-bbox="76 1123 689 1165">Number – fractions</p> <ul style="list-style-type: none"> ▪ recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity ▪ write simple fractions for example, $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ & $\frac{1}{2}$. 	<p data-bbox="698 1123 1464 1165">Geometry – properties of shapes</p> <ul style="list-style-type: none"> ▪ identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line ▪ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces ▪ identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid] ▪ compare and sort common 2-D and 3-D shapes and everyday objects. ▪ 	<ul style="list-style-type: none"> ▪ compare and sequence intervals of time ▪ 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 ▪ know the number of minutes in an hour and the number of hours in a day.

<ul style="list-style-type: none"> ▪ Order simple fractions on a numberline. ▪ Use $\lt; \gt; =$ with simple fractions ▪ Counting in $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$ up to 10. ▪ Add $\frac{1}{4}$ $\frac{1}{3}$ e.g. $\frac{1}{4} + \frac{2}{4}$ ▪ Also, $1\frac{1}{3} + \frac{1}{3} = 1\frac{2}{3}$ ▪ Practical problem solving + and - fractions above - e.g. pizza, cake, chocolate bars etc. ▪ Sharing and division link ▪ Find simple fractions of amounts. E.g. $\frac{1}{2}$ of £20, ▪ Fractions of simple measures / different 2d shapes e.g. $\frac{1}{4}$ of 12cm. Shade $\frac{1}{3}$ of this square 2 different ways. 	<ul style="list-style-type: none"> ▪ Geometry – position and direction <ul style="list-style-type: none"> • 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 anti-clockwise). • order and arrange combinations of mathematical objects in patterns and sequences 	<p>Measurement</p> <ul style="list-style-type: none"> ▪ compare and order lengths, mass, volume/capacity and record the results using $\gt;$, $\lt;$ and $=$ (include comparison using multiples e.g twice as wide). ▪ choose and use appropriate standard units to estimate and measure using standard abbreviations) 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
	<p>Statistics</p> <ul style="list-style-type: none"> ▪ interpret and construct simple pictograms, tally charts, block diagrams and simple tables ▪ ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ▪ ask and answer questions about totalling & comparing categorical data. 	<p>Money</p> <ul style="list-style-type: none"> ▪ recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value ▪ find different combinations of coins that equal the same amounts of money ▪ solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
<p>Ratio and proportion</p> <ul style="list-style-type: none"> ▪ Recognise simple regular patterns and comment on them 	<p>Algebra</p> <ul style="list-style-type: none"> ▪ Recording terms of a 'sequence' ▪ Generating +ve and -ve sequences ▪ Balance puzzles ▪ Counting games with different start numbers and step sizes, with support such as 100 square and bead string ▪ Understanding 'inverses' ▪ Describing a sequence, term to term, using/ understanding times tables as 'terms' of a sequence ▪ Concept of algebraic notation e.g practical missing number envelopes 	