Year 1

Unit	What do I need to know before I start this unit? (Reception)	What will I be learning this year?	What is the next step? (Year 2)
Number – Place Value **Vocabulary:** Number, zero, one to twenty and beyond, none, count (on, up, to, from, down), before, after, more, less, many, few, fewer, least, fewest, smaller, greater, equal to, the same as, odd, even, pair, units, tens, ones, digit, numeral, figures, compare, size, value, between, halfway between, above, below	• Counting on in ones • Counting back in ones • Digit recognition – 0-9 • One more, one less • More/Fewer • Representing numbers up to and beyond 10 using concrete and pictorial representations	• 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 • Given a number, identify one more and one less • 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 • Read and write numbers from 1 to 20 in numerals and words	• Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward • Recognise the place value of each digit in a two-digit number (tens, ones) • Identify, represent and estimate numbers using different representations, including the number line • Compare and order numbers from 0 up to 100; use and = signs • Read and write numbers to at least 100 in numerals and in words • Use place value and number facts to solve problems.

NOTES:
- Practice counting (cardinal numbers) and ordering (ordinal numbers) as well as to indicate a quantity (e.g. 3 apples/2 pens/3cm)
- Recognise place value in numbers up to 100 – comparing, ordering, counting, reading and writing numbers.
- Begin to count objects in sets of 2, 3 and 5
- Notice patterns and repetitions in the number system, including odd and even numbers
- Recognise and create repeated patterns with objects and shapes

Unit	What do I need to know before I start this unit? (Reception)	What will I be learning this year?	What is the next step? (Year 2)
Number – Addition and Subtraction **Vocabulary:** Number bonds, number lines, add, more, plus, make, sum, total, altogether, number bonds, number lines, add, more, plus, make, sum, total, altogether, inverse, double, halve, equals, the same, difference between, subtract, take away, minus	• Counting on in ones • Counting back in ones • More than/less than • Taking away • Adding on	• Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • Represent and use number bonds and related subtraction facts within 20 • Add and subtract one-digit and two-digit numbers to 20, including zero • Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9.	• 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 • Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • Add and subtract numbers using concrete objects, pictorial representations, and mentally • Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
	NOTES: • Memorise and reason with number bonds up to and beyond 20. • Realise the effect of adding and subtracting 0 • Discuss and solve problems in practical familiar contexts, including using quantities		

Unit	What do I need to know before I start this unit? (Reception)	What will I be learning this year?	What is the next step? (Year 2)
Number – Multiplication and Division **Vocabulary:** count in twos, fives, tens, how many times? Lots of, groups of, multiples of, repeat addition, array, row, column, double, halve, share, equal, group in pairs/threes, divide, divided by, left over	• Grouping • Sharing	• 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.	• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

NOTES:

• Through grouping and sharing small quantities, pupils begin to understand: multiplication and division; doubling numbers and quantities; and finding simple fractions of objects, numbers and quantities.

• They make connections between arrays, number patterns, and counting in twos, fives and tens.

Unit	What do I need to know before I start this unit? (Reception)	What will I be learning this year?	What is the next step? (Year 2)
Number – Fractions **Vocabulary:** Half, quarter, part, section, equal	• Sharing quantities of objects • Sharing singular objects. E.g. cutting a cake	• Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	• Recognise, find, name and write fractions 3 1 , 4 1 , 4 2 and 4 3 of a length, shape, set of objects or quantity • Write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2 .

NOTES:

- Learn half and quarter as fractions of shapes, objects and quantities
- Connect halves and quarters to equal sharing of groups and objects and to measure
- Begin to understand halves and quarters as parts of a whole

Unit	What do I need to know before I start this unit? (Reception)	What will I be learning this year?	What is the next step? (Year 2)
Measurement **Vocabulary:** Estimate, measure, heavy, light, long, short, centimetres, metres, minutes, hours, seconds, clock, timer	• Understanding and comparing long and short objects • Understand and compare light and heavy objects • Knowing when a container is full/empty – judging how much more is required to fill a container • To know that time is measured in seconds, minutes and hours • To know the days of the week	• Compare, describe and solve practical problems for: o lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] o mass/weight [for example, heavy/light, heavier than, lighter than] o capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] o time [for example, quicker, slower, earlier, later] • measure and begin to record the following: o lengths and heights o mass/weight o capacity and volume o time (hours, minutes, seconds) • recognise and know the value of different denominations of coins and notes • sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and = • 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 • 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

• tell the time to the hour and half past 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.

NOTES:

- The pairs of terms: mass and weight, volume and capacity, are used interchangeably at this stage.

- Pupils move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example, counting) and continuous (for example, liquid) measurement, to using manageable common standard units.

- In order to become familiar with standard measures, pupils begin to use measuring tools such as a ruler, weighing scales and containers.

- Pupils use the language of time, including telling the time throughout the day, first using o'clock and then half past.

Unit	What do I need to know before I start this unit? (Reception)	What will I be learning this year?	What is the next step? (Year 2)

Geometry – Properties of Shape
 	
Vocabulary:
group, sort, cube, cuboid, pyramid, sphere, cone, cylinder, circle, triangle, square, hexagon, pentagon, flat, curved, straight, face, side, edge, corner
	• Recognise some 2D shapes
	• Recognise that 2D shapes have different numbers of sides
		• Recognise and name common 2-D and 3-D shapes, including:
		
		  o 2-D shapes [for example, rectangles (including squares), circles and triangles]
		  o 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].
			• 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.

	NOTES: • Handle common 2-D and 3-D shapes, naming these and related everyday objects fluently. They recognise these shapes in different orientations and sizes, and know that rectangles, triangles, cuboids and pyramids are not always similar to each other.		

Unit	What do I need to know before I start this unit? (Reception)	What will I be learning this year?	What is the next step? (Year 2)
Geometry – Position and Direction **Vocabulary:** Position, direction, over, under, next to, on inside, above, below, top, bottom, side, on, in outside, inside, out, around, front, back, behind, apart, middle, edge, centre, corner, direction, left, right, up down, forwards, backwards, across, close, far, near, along, through	• Recognise some 2D shapes • Recognise that 2D shapes have different numbers of sides	• Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	• Order and arrange combinations of mathematical objects in patterns and sequences • 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).

NOTES:

• Pupils use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside.

• Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face.