HOLLINS GRUNDY PRIMARY SCHOOL

Happiness, Health and Respect for Confident, Creative Learners

Assessment Criteria In Maths

	Numbers	Shape, space and measure
Children aged 3 & 4	Uses some number names and number language spontaneously. Uses some number names accurately in play. Recites numbers in order to 10. Knows that numbers identify how many objects are in a set. Beginning to represent numbers using fingers, marks on paper or pictures. Sometimes matches numeral and quantity correctly. Shows curiosity about numbers by offering comments or asking questions. Compares two groups of objects, saying when they have the same number. Shows an interest in number problems. Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same. Shows an interest in numerals in the environment. Shows an interest in representing numbers. Realises not only objects, but anything can be counted, including steps, claps or jumps.	Shows an interest in shape and space by playing with shapes or making arrangements with objects. Shows awareness of similarities of shapes in the environment. Uses positional language. Shows interest in shape by sustained construction activity or by talking about shapes or arrangements. Shows interest in shapes in the environment. Uses shapes appropriately for tasks. Beginning to talk about the shapes of everyday objects, e.g. ‘round’ and ‘tall’.

Children In Reception		
Number – number and place value	**Number – addition and subtraction**	**Number – multiplication and division**
• Recognise some numerals of personal significance. • Recognises numerals 1 to 5. • Counts up to three or four objects by saying one number name for each item. • Separate a group of three or four objects in different ways, beginning to recognise that the total is still the same. • Represent numbers in different ways, using equipment, five or ten-frames, part-part-whole models, number lines, stories. • Counts actions or objects which cannot be moved. • Counts out up to six objects from a larger group. • Counts objects to 10 • Beginning to count beyond 10 • Selects the correct numeral to represent 1 to 5 objects • Selects the correct numeral to represent 1 to 10 objects. • Counts an irregular arrangement of up to ten objects. • Estimates how many objects they can see and checks by counting them. • Compare sets of objects, saying which has more objects. • Compare sets of objects, saying how many more are in each set. • Compare sets of objects, saying which has fewer objects • Compare sets of objects, saying how many fewer are in each set. • Says the number that is one more than a given number. • Finds one more or one less from a group of up to five objects • Finds one more or one less from a group of up to ten objects. • Records, using marks that they can interpret and explain. • Begins to identify own mathematical problems based on own interests and fascinations. • Uses familiar objects and common shapes to create and recreate patterns and build models.	• Finds the total number of items in two groups by counting all of them. • Select two groups of objects to make a given total of objects. • Understand the effect of adding zero. • Count on to add. • Understand addition as an increase. • Subtract by counting a group of objects, counting out the number to remove and then recounting all. • Understand the effect of subtracting zero. • Count back to subtract. • Understand subtraction as a decrease. • Begins to identify own mathematical problems based on own interests and fascinations.	

Children In Reception		
Number – fractions	**Geometry – properties of shapes**	**Geometry – position and direction**
• Children can recognise half of an object	• Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. • Selects a particular named shape.	• Can describe their relative position such as 'behind' or 'next to'.

Measurement	**Statistics**
• Orders two or three items by length or height. • Orders two items by weight or capacity. • Uses everyday language related to time. • Beginning to use everyday language related to money. • Orders and sequences familiar events. • Measures short periods of time in simple ways.	
• Children estimate, measure, weigh and compare and order objects and talk about properties, position and time, including problem solving.	

Early Learning Goals		
Number – number and place value	**Number – addition and subtraction**	**Number – multiplication and division**
• Have a deep understanding of number to 10, including the composition of each number; • Subitise (recognise quantities without counting) up to 5; • Verbally count beyond 20, • recognising the pattern of the counting system • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity • Explore and represent patterns within numbers up to 10, including evens and odds,	• Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 addition • Automatically recall number bonds up to 5 subtraction • Recall at least 5 number bonds to 10, • Recall at least 4 double facts within 10.	• Explore and represent patterns within number up to 10 including double facts and how quantities can be distributed equally (sharing).
• Children estimate a number of objects and check quantities by counting up to 20.		• Children can count in 2's • Children can count in 5's • Children can count in 10's • They solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups

Sig Below	Below	Just At	Securely At	Above	Sig Above
Working within the curriculum below that of their year group	Working within the curriculum for their year group but unlikely to achieve end of year expectations	Working within the curriculum for their year group but likely to achieve end of year expectations	Working within the curriculum for their year group and certain to achieve end of year expectations	Working within the curriculum for their year group and likely to achieve greater depth	Working within the curriculum above that of their year group **This will not be used in our assessments**

End of Key Stage Judgement	**Emerging**	**ELG**	EXC
		Must include all blue statements	Must include all purple statements

Year 1 - Maths **Name:** _____ .

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
Sufficient evidence shows the ability to: ❑ Read and write numbers from 1 to 10 in numerals and words ❑ Read and write numbers from 1 to 20 in numerals and words. ❑ Count in multiples of 2s, 5s and 10s. ❑ Given a number, identify 1 more and 1 less. ❑ Identify odd and even numbers	**Sufficient evidence shows the ability to:** ❑ Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. ❑ Represent and use number bonds and related subtraction facts within 5. ❑ Represent and use number bonds and related subtraction facts within 10.	
❑ Compare numbers using > < = to 20 ❑ Read and write numbers from 1 to 50 in numerals and words ❑ Begin to recognise the place value of numbers beyond 20 (tens and ones) ❑ 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. (to at least 30)	❑ Represent and use number bonds and related subtraction facts within 20. ❑ Add and subtract one-digit and two-digit numbers to 20, including 0.	❑ Recall and use doubles of numbers to 10 and corresponding halves
❑ 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;	❑ Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 =? – 9.	**Sufficient evidence shows the ability to:** ❑ 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.

Number – fractions	Geometry – properties of shapes	Geometry – position and direction
	Sufficient evidence shows the ability to: **Recognise and name common 2-D and 3-D shapes, including:** ❑ 2-D shapes [for example, rectangles (including squares), circles and triangles] ❑ 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. ❑ Recognise shapes in different orientations ❑ Recognise and create repeating patterns with objects and shapes ❑ Describe what is special about certain shapes (e.g. a triangle has 3 sides and 3 corners or vertices).	**Sufficient evidence shows the ability to:** ❑ Describe position, direction and movement, including whole, half, quarter and three-quarter turns.
Sufficient evidence shows the ability to: ❑ Recognise, find and name a half as 1/2 equal parts of an object or shape ❑ Recognise, find and name a half as 1/2 equal parts of a quantity.		
Sufficient evidence shows the ability to: ❑ Recognise, find and name a quarter as 1 /4 equal parts of an object or shape. ❑ Recognise, find and name a quarter as 1 /4 equal parts of an object, shape or quantity.		

Measurement	Statistics
Measure and begin to record the following: ❑ lengths and heights ❑ mass/weight ❑ Recognise and know the value of different denominations of coins and notes **Sufficient evidence shows the ability to:** **Compare, describe and solve practical problems for:** ❑ mass/weight [for example, heavy/light, heavier than, lighter than]	
Measure and begin to record the following: ❑ capacity and volume **Sufficient evidence shows the ability to:** **Compare, describe and solve practical problems for:** ❑ lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ❑ capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]	
Measure and begin to record the following: ❑ time (hours, minutes, seconds) ❑ 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. ❑ Tell the time to the hour and draw the hands on a clock face to show these times. ❑ Tell the time to half past the hour and draw the hands on a clock face to show these times. **Sufficient evidence shows the ability to:** **Compare, describe and solve practical problems for:** ❑ time [for example, quicker, slower, earlier, later] ❑ Recognise different coins and make small amounts.	❑ Present and interpret data in block diagrams using practical equipment. ❑ Ask and answer simple questions by counting the number of objects in each category. ❑ Ask and answer questions by comparing categorical data. ❑ Sort objects, numbers and shapes to a given criterion and their own

Sig Below	Below	Just At	Securely At	Above	Sig Above
Working within the curriculum below that of their year group	Working within the curriculum for their year group but unlikely to achieve end of year expectations	Working within the curriculum for their year group but likely to achieve end of year expectations	Working within the curriculum for their year group and certain to achieve end of year expectations	Working within the curriculum for their year group and likely to achieve greater depth	Working within the curriculum above that of their year group **This will not be used in our assessments**

Year 2 - Maths

Name: _____ .

Number – number and place	Number – addition and subtraction	Number – multiplication and division
Sufficient evidence shows the ability to: ❑ 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). ❑ Read and write numbers to at least 100 in numerals and in words ❑ Describe and extend simple sequences involving counting on or back in different steps	**Sufficient evidence shows the ability to:** ❑ Understand subtraction as take away and difference (how many more, how many less/fewer) ❑ Solve problems 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 ❑ Add and subtract numbers using concrete objects, pictorial representations, and mentally ❑ Add and subtract numbers including: a two-digit number and ones	

❑ Compare and order numbers from 0 up to 100; use <, > and = signs. ❑ Identify, represent and estimate numbers using different representations, including the number line.	❑ Add and subtract numbers two-digit number and tens ❑ Add 2 two-digit numbers within 100 (e.g. 48 + 35) and can demonstrate their method using concrete apparatus or pictorial representations. ❑ The pupil can subtract mentally a two-digit number from another two-digit number when there is no regrouping required (e.g. 74 – 33). ❑ Add three one-digit numbers. ❑ Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.	**Sufficient evidence shows the ability to:** ❑ Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. ❑ Understand multiplication as repeated addition and arrays ❑ Understand division as sharing and grouping and that a division can have a remainder ❑ Recall doubles and halves to 20 ❑ 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.
❑ Demonstrate an understanding of place value (using apparatus if necessary to support them) by stating the difference in the tens and ones between two numbers i.e. 77 and 43 has a difference of 4 tens and 4 ones ❑ Use place value and number facts to solve problems. ❑ Partition numbers in a variety of ways (e.g. 23 = 20 + 3 and 10 + 13).	❑ Derive and use related facts up to 100. ❑ Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	❑ Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. ❑ Pupils can solve word problems that involve more than one step for all 4 operations

Number – fractions	Geometry – properties of shapes	Geometry – position and direction
Sufficient evidence shows the ability to: ❑ Recognise, find, name and write fractions 1/2, 1/3, 1/4, 2/4, 3/4 of a length, shape, set of objects or quantity. ❑ Write simple fractions for example, 1/2 of 6 = 3	**Sufficient evidence shows the ability to:** ❑ Recognise and name 2D and 3D shapes ❑ Identify and describe the properties of 2-D and 3-D shapes, including the number of sides	**Sufficient evidence shows the ability to:** ❑ Order and arrange combinations of mathematical objects in patterns and sequences.
	❑ 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]. ❑ Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.	❑ 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).
❑ Recognise the equivalence of 2/4 and ½ ❑ Understand that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be ❑ Count on and back in steps of ½ and 1/4	❑ Compare and sort common 2-D and 3-D shapes and everyday objects.	

Statistics	Measurement
	Sufficient evidence shows the ability to: **Choose and use appropriate standard units to estimate and measure…to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.** ❑ length/height in any direction (m/cm); mass (kg/g); capacity (litres/ml) ❑ Read scales in divisions of ones, twos, fives and tens ❑ 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
Sufficient evidence shows the ability to: ❑ 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. ❑ Compare and sort objects, numbers and common 2D, 3D shapes ❑ Ask and answer questions about totalling and comparing categorical data.	❑ Find different combinations of coins that equal the same amounts of money. ❑ Choose and use appropriate standard units to estimate and measure temperature (°C); Compare temperature and record the results using >, < and =. ❑ Compare and sequence intervals of time. ❑ Tell and write the time to quarter past/to the hour and draw the hands on a clock face to show these times. ❑ Tell and write the time to five minutes 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.
	❑ Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

Sig Below	Below	Just At	Securely At	Above	Sig Above
Working within the curriculum below that of their year group	Working within the curriculum for their year group but unlikely to achieve end of year expectations	Working within the curriculum for their year group but likely to achieve end of year expectations	Working within the curriculum for their year group and certain to achieve end of year expectations	Working within the curriculum for their year group and likely to achieve greater depth	Working within the curriculum above that of their year group **This will not be used in our assessments**

Year 3 - Maths

Name: _____.

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
Sufficient evidence shows the ability to: ❑ Count from 0 in multiples of 4, 8, 50 and 100 ❑ Find 10 or 100 more or less than a given number. ❑ Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	**Sufficient evidence shows the ability to:** **Add and subtract numbers mentally, including:** ❑ a three-digit number and ones, ❑ a three-digit number and tens,	**Sufficient evidence shows the ability to:** ❑ Recall and use multiplication facts for the 3, 4 and 8 multiplication tables. ❑ Recall and use division facts for the 3, 4 and 8 multiplication tables. ❑ Derive and use doubles of all multiples of 50 to 500 ❑ Understand division is the inverse of multiplication and vice versa
❑ Partition numbers in different ways (eg 146 = 100+ 40 + 6 and 130 + 16) ❑ Read Roman numerals from I to XII	❑ Add and subtract numbers mentally, including: a three-digit number and hundreds. ❑ Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. ❑ Derive and use addition and subtraction facts to 100 (and multiples)	
❑ Compare and order numbers up to 1000. ❑ Identify, represent and estimate numbers using different representations (including number line) ❑ Read and write numbers up to 1000 in numerals and in words. ❑ Solve number problems and practical problems involving these ideas. ❑ Round numbers to 1000 to the nearest 10 and 100	❑ Estimate the answer to a calculation and use inverse operations to check answers. ❑ Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	❑ Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ❑ Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy ❑ Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Number – fractions	Geometry – properties of shapes	Geometry – position and direction
	Sufficient evidence shows the ability to: ❑ Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them. ❑ Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	**Sufficient evidence shows the ability to:** ❑ 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). ❑ Describe positions on a square grid labelled with letters and numbers
Sufficient evidence shows the ability to: ❑ Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. ❑ Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ❑ Recognise and show, using diagrams, equivalent fractions with small denominator.	❑ Recognise angles as a property of shape or a description of a turn. ❑ Identify right angles; recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; Identify whether angles are greater than or less than a right angle.	
❑ Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]. ❑ Compare and order unit fractions, and fractions with the same denominators. ❑ Count on and back in steps of ½, ¼ and 1/3 ❑ Solve problems that involve all of the above. ❑ Read and write numbers to 1 decimal place ❑ Identify the value of each digit to 1 decimal place ❑ Compare and order decimals to 1 decimal place ❑ Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 ❑ Recognise the relationship between fractions and decimals and express these with some equivalent quantities e.g. 0.5 =1/2 and 0.1 = 1/10		

Measurement	Statistics
Sufficient evidence shows the ability to: ❑ Measure, compare, add and subtract: lengths (m/cm/mm) ❑ Convert between mm and cm and m and cm ❑ Measure the perimeter of simple 2-D shapes. ❑ Add and subtract amounts of money to give change, using both £ and p in practical contexts. ❑ Recognise that ten 10p coins equal £1 and each coin is 1/10 of a £1	
❑ Measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml). ❑ Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. ❑ Estimate and read time with increasing accuracy to the nearest minute; ❑ Record and compare time in terms of seconds, minutes and hours; ❑ Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. ❑ Know the number of seconds in a minute and the number of days in each month, year and leap year. ❑ Compare durations of events [for example to calculate the time taken by particular events or tasks].	**Sufficient evidence shows the ability to:** ❑ Interpret and present data using bar charts, pictograms and tables ❑ Understand and use simple scales, for example 2,5,10 units in pictograms and bar charts with increasing accuracy ❑ Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?']. ❑ Use information presented in scaled bar charts and pictograms and tables.

Sig Below	Below	Just At	Securely At	Above	Sig Above
Working within the curriculum below that of their year group	Working within the curriculum for their year group but unlikely to achieve end of year expectations	Working within the curriculum for their year group but likely to achieve end of year expectations	Working within the curriculum for their year group and certain to achieve end of year expectations	Working within the curriculum for their year group and likely to achieve greater depth	Working within the curriculum above that of their year group **This will not be used in our assessments**

Year 4 - Maths

Name: _____.

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
Sufficient evidence shows the ability to: ❑ Count in multiples of 6, 7, 9, 25 and 1000 find 1000 more or less than a given number. ❑ Count backwards through zero to include negative numbers. ❑ Identify, represent and estimate numbers using different representations ❑ Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). ❑ Order and compare numbers beyond 1000.	**Sufficient evidence shows the ability to:** ❑ Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	**Sufficient evidence shows the ability to:** ❑ Recall multiplication and division facts for multiplication tables up to 12 × 12. ❑ Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.
❑ Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. ❑ Solve number and practical problems that involve all of the above and with increasingly large positive numbers. ❑ Read and write numbers to at least 10 000.	❑ Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method). ❑ Estimate and use inverse operations to check answers to a calculation. ❑ Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place).	❑ Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
❑ Identify the value of each digit to two decimal places. ❑ Partition numbers in different ways (e.g. 2.3 = 2+0.3 & 1+1.3). ❑ Find 0.1, 1, 10, 100 or 1000 more or less than a given number. ❑ Round any number to the nearest 10, 100 or 1000.	❑ Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. ❑ Add and subtract mentally combinations of two and three-digit numbers and decimals to one decimal place.	❑ Divide numbers up to 3 digits by a one-digit number with and without remainders ❑ Recognise and use factor pairs and commutativity in mental calculations. ❑ Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit

❑ Solve number and practical problems that involve all of the above and with increasingly large positive numbers. ❑ Describe and extend number sequences involving counting on or back in different steps, including sequences with multiplication and division steps. ❑ The pupil can demonstrate an understanding of place value, including large numbers and decimals for 4-digit numbers and two decimal places, e.g. what is the value of the '7' in 2,476.		numbers by one digit, *division (including interpreting remainders),* integer scaling problems and harder correspondence problems such as n objects are connected to m objects. ❑ Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Number – fractions, decimals and percentages	Geometry – properties of shapes	Geometry – position and direction
Sufficient evidence shows the ability to: ❑ Understand a fraction is one whole number divided by another (e.g. ¾ can be interpreted 3 divided by 4) ❑ Recognise and show, using diagrams, families of common equivalent fractions ❑ Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ❑ Add and subtract fractions with the same denominator (including improper fractions and mixed number fractions with the same denominator). ❑ Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	**Sufficient evidence shows the ability to:** ❑ Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. ❑ Identify acute and obtuse angles and compare and order angles up to two right angles by size.	**Sufficient evidence shows the ability to:** ❑ Describe positions on a 2-D grid as coordinates in the first quadrant. ❑ Describe movements between positions as translations of a given unit to the left/right and up/down. ❑ Plot specified points and draw sides to complete a given polygon.
❑ Compare and order unit fractions and fractions with the same denominator (including on a number line)		
❑ Recognise and write decimal equivalents of any number of tenths or hundredths. ❑ Recognise and write decimal equivalents to 1/4, 1/2, 3/4. ❑ Round decimals with one decimal place to the nearest whole number. ❑ Compare and order numbers with the same number of decimal places up to two decimal places. ❑ Solve simple measure and money problems involving fractions and decimals to two decimal places.	❑ Identify lines of symmetry in 2-D shapes presented in different orientations. ❑ Complete a simple symmetric figure with respect to a specific line of symmetry.	

Measurement	Statistics
❑ Estimate, compare and calculate different measures, including money in pounds and pence. Recognise that one hundred 1p coins equal £1 and that each coin is $\frac{1}{100}$ of £1. ❑ Order temperatures including those below 0°C.	
❑ Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days and problems involving money and measures. ❑ Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. ❑ Find the area of rectilinear shapes by counting squares.	**Sufficient evidence shows the ability to:** ❑ Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ❑ Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
❑ Read, write and convert time between analogue and digital 12- and 24-hour clocks. ❑ Convert between different units of measure [e.g. kilometre to metre; hour to minute].	

Sig Below	Below	Just At	Securely At	Above	Sig Above
Working within the curriculum below that of their year group	Working within the curriculum for their year group but unlikely to achieve end of year expectations	Working within the curriculum for their year group but likely to achieve end of year expectations	Working within the curriculum for their year group and certain to achieve end of year expectations	Working within the curriculum for their year group and likely to achieve greater depth	Working within the curriculum above that of their year group **This will not be used in our assessments**

Year 5 - Maths **Name: _____ .**

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
Sufficient evidence shows the ability to: ❑ Read, write, order and compare numbers up to 1 000 000. ❑ Identify represent and estimate numbers using a number line ❑ Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.	Sufficient evidence shows the ability to: ❑ Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). ❑ Add and subtract numbers mentally with increasingly large numbers.	Sufficient evidence shows the ability to: ❑ Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. ❑ Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. ❑ Establish whether a number up to 100 is prime & recall prime numbers up to 19. ❑ Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. ❑ Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).
❑ Round any number up to 1 000 000 to the nearest 10, 100, 1000 ❑ Round any number up to 1 000 000 to the nearest 10 000 and 100 000. ❑ Round decimals with two decimal places to the nearest whole number ❑ Round decimals with two decimal places to one decimal place. ❑ Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.	❑ Add and subtract (and solve problems) with numbers up to 2 decimal places ❑ Recall and use addition and subtraction facts for 1 and 10 (with decimal numbers to 1 dp) ❑ Recall and use addition and subtraction facts for 1 and 10 (with decimal numbers to 2 dp) ❑ Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. ❑ Use the inverse operation to check workings and solve problems	❑ Multiply and divide numbers mentally drawing upon known facts. ❑ Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context ❑ Multiply and divide whole numbers and those involving decimals by 10, 100 &1000. ❑ Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.

❑ Read, write, order & compare numbers with up to three decimal places. ❑ Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. ❑ Solve number problems and practical problems that involve all of the above.	❑ Solve addition and subtraction methods to solve multi-step problems with all operations	❑ Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. ❑ Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Number – fractions, decimals and percentages	Geometry – properties of shapes	Geometry – position and direction
Sufficient evidence shows the ability to: ❑ Compare and order fractions whose denominators are all multiples of the same number. ❑ Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. ❑ Recognise mixed numbers and improper fractions and convert from one form to the other & write mathematical statements > 1 as a mixed number [2/5 + 4/5 = 6/5 = 1 1/5]. ❑ Add and subtract fractions with the same denominator and denominators that are multiples of the same number. ❑ Write statements > 1 as a mixed number ❑ Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. ❑ Read and write decimal numbers as fractions [for example, 0.71 = 71/100].	Sufficient evidence shows the ability to: ❑ Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. ❑ Draw given angles, and measure them in degrees (˚)	

❑ Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.		
	❑ Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.	
❑ Recognise the percent symbol (%) and understand that percent relates to 'number of parts per hundred', write percentages as a fraction with denominator 100, & as a decimal. ❑ Solve problems which require knowing percent & decimal equivalents of 1/2, 1/4 , 1/5 , 2/5 , 4/5 and those fractions with a denominator of a multiple of 10 or 25. ❑ Count on and back in mixed number steps such as 1 1/2 ❑ The pupil can recognise the relationship between fractions, decimals and percentages and can express them as equivalent quantities e.g. one piece of cake that has been cut into 5 equal slices can be expressed as 1/5 or 0.2 or 20% of the whole cake).	❑ Identify: angles at a point and one whole turn (total 360˚) angles at a point on a straight line & 1/2 a turn (total 180˚) and other multiples of 90˚. ❑ Use the properties of rectangles to deduce related facts and find missing lengths and angles; distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Sufficient evidence shows the ability to: ❑ 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. ❑ Plot specified points and complete shapes

Measurement	Statistics
Sufficient evidence shows the ability to: ❑ Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre & millilitre). ❑ Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. ❑ Solve problems involving converting between units of time.	
❑ Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. ❑ Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes. ❑ Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water].	
❑ Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. ❑ Calculate with measures (e.g. calculate length of a bus journey given start and end times; convert 0.05km into m and then into cm).	Sufficient evidence shows the ability to: ❑ Solve comparison, sum and difference problems using information presented in a line graph. ❑ Complete, read and interpret information in tables, including timetables.

Sig Below	Below	Just At	Securely At	Above	Sig Above
Working within the curriculum below that of their year group	Working within the curriculum for their year group but unlikely to achieve end of year expectations	Working within the curriculum for their year group but likely to achieve end of year expectations	Working within the curriculum for their year group and certain to achieve end of year expectations	Working within the curriculum for their year group and likely to achieve greater depth	Working within the curriculum above that of their year group **This will not be used in our assessments**

Year 6 - Maths

Name: _____ .

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
❑ Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit. ❑ Identify the value of each digit to three decimal places. ❑ Order and compare numbers including integers, decimals and negative numbers. ❑ Round any whole number to a required degree of accuracy. ❑ Round decimals with three decimal places to the nearest whole number or one or two decimal places. ❑ Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places. ❑ Use negative numbers in context, and calculate intervals across zero. ❑ Count forwards or backwards in steps of integers, decimals ❑ Describe and extend number sequences including those with multiplication and division steps, inconsistent steps, alternating steps and those where the step size is a decimal	❑ Add and subtract whole numbers and decimals using formal written methods (columnar addition and subtraction). ❑ Use knowledge of the order of operations to carry out calculations including the four operations. ❑ Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	❑ Identify common factors, common multiples and prime numbers. ❑ Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. ❑ Multiply one-digit numbers with up to two decimal places by whole numbers. ❑ Divide numbers up to 4 digits by a two-digit whole number using the formal written methods of short or long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. ❑ Use written division methods in cases where the answer has up to two decimal places. ❑ Solve problems involving all four operations, including those with missing numbers.

.		
	❑ Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. ❑ Perform mental calculations including with mixed operations and large numbers *and decimals.*	

Number – fractions, decimals and percentages	Geometry – properties of shapes	Geometry – position and direction
❑ Compare and order fractions, including fractions > 1 (including on a number line). ❑ Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ❑ Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. e.g. one piece of cake that has been cut into 5 equal slices can be expressed as 1/5 or 0.2 or 20% of the whole cake). ❑ Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375 and $\frac{3}{8}$). ❑ Add fractions with different denominators and mixed numbers, using the concept of equivalent fractions. ❑ Subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. ❑ Multiply simple pairs of proper fractions, writing the answer in its simplest form e.g. ¼ x ½ = 1/8 ❑ Divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$). ❑ Find simple percentages of amounts. ❑ Solve problems which require answers to be rounded to specified degrees of accuracy ❑ Solve problems involving the calculation of percentages (e.g. of measures and such as 15% of 260) and the use of percentages for comparison.	❑ Compare/classify geometric shapes based on the properties and sizes. ❑ Draw 2-D shapes using given dimensions and angles. ❑ Recognise where angles meet at a point ❑ Calculate missing angles in a straight line ❑ Identify angles which are vertically opposite ❑ Calculate missing angles on a full turn ❑ Find unknown angles in any triangles and in quadrilaterals ❑ Find unknown angles in regular polygons. ❑ The pupil can use mathematical reasoning to find missing angles (e.g. the missing angle in an isosceles triangle when one of the angles is given; the missing angle in a more complex diagram using knowledge about angles at a point and vertically opposite angles). ❑ Recognise, describe and build 3-D shapes, and nets.	

	❑ Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.	❑ Describe positions on the full coordinate grid (all four quadrants). ❑ Draw and translate simple shapes on the coordinate plane. ❑ Reflect simple shapes in the axes (vertical, horizontal and diagonal)

Ratio and proportion	Algebra	Statistics
❑ Solve problems involving the relative sizes of two quantities where missing values can be found using integer multiplication/division facts. ❑ Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. ❑ Solve problems involving similar shapes where the scale factor is known or can be found.		❑ Continue to complete and interpret information in a variety of sorting diagrams (including sorting properties of numbers and shapes). ❑ Interpret pie charts and use these to solve problems. ❑ Interpret line graphs and use these to solve problems. ❑ Construct pie charts ❑ Construct line graphs ❑ Solve comparison, sum and difference problems using information presented in all types of graph. ❑ Calculate and interpret the mean as an average.
	❑ Use simple formulae. ❑ Generate and describe linear number sequences. ❑ Express missing number problems algebraically. ❑ Find pairs of numbers that satisfy an equation with two unknowns. ❑ Enumerate possibilities of combinations of two variables.	

Measurement

- ❑ Calculate differences in temperature, including those that involved a positive and negative temperature.
- ❑
- ❑ Use, read and write standard units of length using decimal notation to three decimal places.
- ❑ Use, read and write standard units of mass using decimal notation to three decimal places.
- ❑ Use, read and write standard units of volume using decimal notation to three decimal places.
- ❑ Use, read and write standard units of time
- ❑ Convert between standard units of length, mass and volume using decimal notation to three decimal places.
- ❑ Convert between standard units of time.
- ❑ Convert between miles and kilometres.
- ❑ Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.

- ❑ Recognise that shapes with the same areas can have different perimeters and vice versa.
- ❑ Calculate the area of parallelograms and triangles when given a formula.
- ❑ The pupil can substitute values into a simple formula to solve problems e.g. perimeter of a rectangle or area of a triangle
- ❑ Recognise when it is possible to use formulae for area and volume of shapes.
- ❑ Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units (e.g. mm^3 and km^3).

Sig Below	Below	Just At	Securely At	Above	Sig Above
Working within the curriculum below that of their year group	Working within the curriculum for their year group but unlikely to achieve end of year expectations	Working within the curriculum for their year group but likely to achieve end of year expectations	Working within the curriculum for their year group and certain to achieve end of year expectations	Working within the curriculum for their year group and likely to achieve greater depth	Working within the curriculum above that of their year group **This will not be used in our assessments**