Priestley Primary School
Maths Assessment Steps
Steps 16 - 18

Yr5	Number System	Addition & Subtraction	Multiplication & Division	Fractions & Decimals
End of Year Expectations				
	• **I can read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit** • **I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000** • **I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through 0.** • **I can round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000** • **I can read Roman numerals to 1,000 (M) and recognize years written in Roman numerals** • **I can read, write, order and compare numbers with up to 3 d.p.** • **I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents** • **I can round decimals with two d.p. to the nearest whole number and to one d.p** • **I can solve problems involving number up to three d.p.**	• **I can add and subtract whole numbers with more than 4 digits using formal columnar addition** • **I can add and subtract numbers mentally with increasingly large numbers** • **I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy** • **I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why**	• **I can identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers** • **I can multiply and divide numbers mentally using known facts** • **I can multiply number up to four digits by a one or two digit number using formal written method including long multiplication for two digit numbers** • **I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000** • **I can divide numbers up to four-digits by a one-digit number using the formal written method of short division and interpret remainders appropriately and according to context** • **I can solve problems using multiplication and division and a combination of these including understanding the equals sign** • **I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple ratios** • **I know and use the words prime number, prime factors and composite numbers** • **I can tell whether a number up to 100 is a prime number and recall prime numbers up to 19** • **I can recognise and use square numbers and cube numbers and their notation** • **I can solve problems using multiplication and division using my knowledge of factors and multiples square and cubes.**	• **I can compare and order fractions whose denominators are multiples of the same number** • **I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths** • **I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <1 as mixed numbers e.g. 2/5 + 4/5 = 6/5 = 1 1/5** • **I can add and subtract fractions with the same denominator and multiples of the same number** • **I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams** • **I can read and write decimal numbers as fractions** • **I can recognise the percent symbol (%) and understand percent means number of parts per hundred and write percentages as a fraction with a denominator 100 and as a decimal** • **I can solve problems which require knowing percentage and decimal equivalents of ½, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25. ***
18-3 Mastering		**18-3 Mastering**	**18-3 Mastering**	**18-3 Mastering**
18.2 **18.1**	• I can read, write and order numbers to at least 1,000,000 and determine the value of each digit • I can count in thousands from any given number • I can put negative numbers onto a number line • I can round any number to the nearest 1000, 10,000 and 100,000. • I can read Roman numerals to1000 (I to M) and I understand how numbers developed to include 0.	**18.2** **18.1**	• I can add and subtract mentally a five digit number and a multiple of a hundred greater than a 1000 • I can estimate the answer to a calculation using rounding and say whether my answer is likely • I can solve addition and subtraction two step problems in contexts, deciding which operations to use and why.	**18.2** **18.1**	• I can identify factors including all factor pairs of a number, and common factors of two numbers • I can identify multiples of numbers • I can use multiplication and division facts up to 12 x 12 • I can divide up to four-digit number by a one-digit number using short division • I can solve multiplication and division two- step problems in contexts, deciding which operations to use and why • Solve problems involving multiplying and	**18.2** **18.1**	• I can compare and order fractions whose • denominators are multiples of the same number • I can add and subtract fractions with the same denominator and multiples of the same number • I can read and write decimal numbers as fractions over 10 and 100. • I know the decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25 • I can multiply proper fractions and mixed

	• I can read, write, order and compare numbers with up to 3 d.p • I can recognise and use thousandths and relate them to hundredths, tenths and decimal equivalents • I can round decimals with two d.p. to the nearest whole number • I can solve problems involving numbers to three d.p				adding, including integer scaling problems • I can interpret remainders appropriately and according to context • I can solve problems using multiplication and division using my knowledge of factors and multiples square and cubes.		numbers by whole numbers, supported by materials and diagrams • I can read and write decimal numbers as fractions • I can write percentages as a fraction with a denominator 100 and as a decimal • I can identify, name and write equivalent fractions of a given fraction
17.2 **17.1**	• I can read, write and order numbers to at least 100,000 and determine the value of each digit • I can count in hundreds from any given number • I can count forwards and backwards through 0 • I can round 4 digit numbers to the nearest 10, 100 and 1000 • I can read Roman numerals to 50 (I to L) • I can read, write, order and compare numbers with 2 d.p. • I can recognise and use hundredths and tenths and relate decimal equivalents • I can round decimals with one d.p. to the nearest whole number	**17.2** **17.1**	• I can add mentally a four digit number and a multiple of 10 greater than 100 • I am beginning to use rounding to estimate the answer to a calculation • I can solve more complex one-step problems in contexts, deciding which operations to use and why	**17.2** **17.1**	• I can find factors for numbers to 50 • I can use multiplication and division facts for the 7, 8 and 9 x table • I can divide a three-digit number by a one digit number using short division • I can solve more complex one-step problems in contexts, deciding which operations to use and why • I know and use the words prime number, prime factors and composite numbers • I can tell whether a number up to 100 is a prime number and recall prime numbers up to 19 • I can recognise and use square numbers and cube numbers and their notation	**17.2** **17.1**	• I can compare and order fractions whose denominators are multiples of the same number using diagrams • I can recognise and show equivalent fractions with small denominators inc tenths and hundredths • I can add and subtract fractions with the same denominator • I know the decimal equivalents of 1/2. 1/4, 1/5, ¾ • I can multiply proper fractions by a whole number using materials and diagrams
16.2 **16.1**	• I can read, write and order numbers to at least 10,000 and determine the value of each digit • I can count backwards through 0 including negative numbers) • I can round 3 digit numbers to the nearest 10 or 100 • I can read Roman numerals to 20 (I to XX) • I can read, write, order and compare numbers with 1 d.p.	**16.2** **16.1**	• I can add and subtract 4 digit numbers using columnar addition • I can add mentally a three digit number and a single digit, multiple of 10 or multiple of 100	**16.2** **16.1**	• I can find factors and all factor pairs for numbers to 20 • I can use multiplication and division facts for the 2, 3, 4, 5, 6 and 10 x table • I can divide a two-digit number by a one digit number using short – division	**16.2** **16.1**	• I can identify 3D shapes from 2D representations • I can measure angles in degrees • I can identify acute and obtuse angles • I can identify angles at a point on a straight line and a ½ turn

Yr5	**Measures**	**Statistics**	**Position & Direction**	**Properties of Shape**
End of Year Expectations				
	• **I can convert between different units of metric measure (e.g. km and m; cm and m; cm and mm; g and kg; l and ml)** • **I can understand and use approximate equivalences between metric units and common imperial units such as inches, pounds**	• **I can solve comparison, sum and difference problems using information presented in line graphs** • **I can complete, read and interpret information in tables, including time tables**	• **I can identify, describe and represent the position of a shape following a reflection or translation, including the appropriate language, and, know that the shape has not changed.**	• **I can identify 3D shapes, including cubes and cuboids, from 2D representations** • **I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles** • **I can draw given angles and measure them in degrees (o)**

and pints • **I can measure and calculate the perimeter of composite rectilinear shapes in cm and m** • **I can calculate and compare the area of squares and rectangles including using standard units cm2 and m2 and estimate the area of irregular shapes** • **I can estimate volume (e.g. using 1 cm3 clocks to build cubes and cuboids) and capacity (e.g. using water)** • **I can solve problems involving converting between units of time** • **I can use all four operations to solve problems including measure(e.g. length, mass, volume, money) using decimal notation including scaling**						• **I can identify:** ○ **angles at a point and one whole turn (total 360o)** ○ **angles at a point on a straight line and 1/2 turn (total 180o)** ○ **other multiples of 90o** • **I can use the properties of rectangles to deduce related facts and find missing lengths and angles** • **I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles**	
18-3 Mastering		**18-3 Mastering**		**18-3 Mastering**		**18-3 Mastering**	
18.2 **18.1**	• I can convert between units of length, capacity and time (seconds, minutes, hours, days) • I can understand and use equivalences between metric units and common imperial units such as inches, pounds and pints • I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • I can find the area of rectilinear shapes by counting squares • I can estimate different volumes and capacity • I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	**18.2** **18.1**	• I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs • I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs	**18.2** **18.1**	• I can describe movements between positions as translations of a given unit and reflections including the appropriate language, and know that the shape has not changed.	**18.2** **18.1**	• I can make models of 3D shapes and recognise 3D shapes in different orientations • I can identify acute and obtuse angles and reflex and compare and order angles up to two right angles (180) by size • I can identify angles at a point and one whole turn (360) and other multiples of 90 • I can use the properties of rectangles to deduce related facts and find missing lengths and angles • I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles
17.2 **17.1**	• I can convert between units of length and capacity (ml, l) • I can find the length of a rectangle given the perimeter and width • I can use the formula L x B to find the area of square/rectangle • I can solve more complex conversion problems in contexts, deciding which operations to use and why	**17.2** **17.1**	• I can collect discrete data • I can draw a line graph • I can read and interpret timetables	**17.2** **17.1**	• I can describe movements between positions as translations of a given unit to the left/right and up/down	**17.2** **17.1**	• I can identify and describe the properties of 3D shapes, including the number of edges, vertices and faces • I can draw given angles • I can identify reflex angles
16.2	• I can convert between units of length (mm, cm, m, km) • I can find the perimeter of simple shapes (e.g. squares and rectangles) • I can find the area of a shape by counting squares	**16.2**	• I can solve comparison, sum and difference problems using information in bar charts, pictograms and tables	**16.2**		**16.2**	• I can identify 3D shapes from 2D representations • I can measure angles in degrees • I can identify acute and obtuse angles • I can identify angles at a point on a straight line and a ½ turn

16.1	• I can solve conversion problems in contexts, deciding which operations to use and why	**16.1**		**16.1**		**16.1**	

Problem Solving

- **I can solve number and practical problems using all of my number skills.**