KS2 NUMBER Assessment Grid				
Assessment Areas	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Number and place value	• Read, write and use numbers up to 1000 in numerals and words . • Count in multiples of 4,8,50 and 100. • Understand the place value of each digit in a three-digit number and find 10 or 100 more/less than a number.	• Read Roman numerals to 100. • Count in multiples of 6,7,9,25 and 1000. • Understand the place value of each digit in a four-digit number and find 1000 more/less than a number. • Round numbers to nearest 10, 100 and 1000. • Begin to recognise negative numbers.	• Read Roman numerals to 1000. • Read, write and use numbers to at least 1,000,000. • Count forwards/backwards and round in powers of 10. • Begin to interpret negative numbers in context.	• Read, write and use numbers up to 10,000,000. • Round any whole number to differing degrees of accuracy. • Calculate intervals across zero when problem solving. • Use negative numbers in context and problem solving.
Addition and Subtraction	• Add and subtract numbers mentally including 3- digits. • Add and subtract numbers up to 3 digits using formal written methods. • Begin to estimate and check answers to calculations using a range of strategies. • Solve addition/subtraction problems: including the use of number facts.	• Add and subtract numbers mentally using known facts. • Add and subtract numbers up to 4-digits using formal written methods. • Routinely estimate and check answers to calculations using a range of strategies. • Solve two step addition/subtraction problems; choosing appropriate operations.	• Accurately add and subtract mentally and using formal written methods. • Routinely check answers to calculations; including by rounding. • Solve multi-step addition/subtraction problems; choosing appropriate operations.	• Mentally calculate mixed operations. • Solve multi-step problems involving addition/subtraction. • Use efficient formal methods for multiplication and division; interpret remainders. • Solve problems involving all four operations and estimate to check answers. • Identify and use common factors and multiples. • Identify prime numbers.
Multiplication and division	• Use mental recall of multiplication/division facts for 3,4,8. • Begin to use formal written methods to calculate larger multiplications. • Solve multiplication/division problems; including simple scaling and correspondence problems.	• Know and use mental recall of multiplication/division facts up to 12 x 12 to derive facts. • Use factor pairs to support mental calculations. • Use formal written method to multiply. • Solve multiplication/addition problems; including applying the rules of arithmetic and two-step problems.	• Use known facts to mentally multiply and divide. • Use formal long and short written methods for multiplication and division; include decimal numbers and interpret remainders. • Recognise and use prime numbers and prime number factors. • Solve multiplication/ division problems; including recognition and application of factors, multiples, squares and cubes.	
Fractions (including decimals and percentages)	• Understand and use unit and non-unit fractions of objects and numbers including tenths. • Recognise equivalent fractions with small denominators. • Begin to compare and order fractions. • Begin to calculate simple addition and subtraction of fractions within one whole.	• Understand and use hundredths. • Begin to recognise decimal and fraction equivalents. • Calculate simple addition and subtraction of fractions; beyond one whole. • Divide by 10,100 and understand the value of the resulting decimal numbers. • Solve fraction and decimal problems in context including rounding and comparing up to 2 decimal places.	• Recognise, compare and order fractions; including mixed numbers and improper fractions. • Calculate addition and subtraction of fractions; including different denominators. • Begin to multiply fractions. • Recognise, compare and round decimals up to 3 decimal places. • Begin to understand decimal numbers as fractions. • Solve problems involving simple percentage and decimal equivalents.	• Simplify, compare and order a range of fractions. • Use equivalence to add and subtract fractions. • Multiply and divide proper fractions. • Understand the relationship of division and fractions. • Recognise and calculate numbers with three decimal places. • Use equivalences between simple fractions, decimals and percentages.
Ratio and proportion	•	•	•	• When solving problems: • Apply multiplication and division facts to calculate proportionality in a range of contexts. • Accurately calculate and use percentages. • Understand scale factor.
Algebra	•	•	•	• Use and generate simple formulae using symbols and letters. • Generate linear number sequences. • Find different possibilities for the variables within equations.

Shirley Junior School   Date: Year Group: Name:

KS2 Measurement, Geometry and Statistics Assessment Grid			
Assessment Grids	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Measurement	• Use the appropriate units of length (m/cm/mm) mass (kg,g) and volume/capacity (/ml) to measure, compare, add and subtract. • Understand how to measure the perimeter of simple 2D shapes. • Solve practical problems for adding and subtracting amounts of money, using both £ and p to give change. • Understand how to tell and record the time; including for analogue 12 hour, 24 hour and clocks with Roman numerals. • Use the terms o'clock, a.m/p.m, morning, afternoon, noon and midnight. • Know a range of equivalent units of time. • Use known facts to compare the duration of events.	• Know how to convert units of measure (e.g. km to m, hour to minutes). • Know how to measure and calculate the perimeter of rectilinear figures (cm/m) • Use counting to find the area of rectilinear shapes. • Solve problems using different range of measures; including money. • Use the units of tine to convert between analogue and digital clocks. • Solve problems using conversion between units of time.	• Know how to convert units of metric measures (e.g. km- m, kg- g, l to ml). • Recognise approximate equivalences between metric units and common imperial units (e.g inches, pints, pounds) • Know how to measure and calculate the perimeter of composite rectilinear shapes (cm/m) • Use estimating, calculating and comparing to find the area of rectangles (including squares) and estimate to find the area of irregular shapes. • Use practical resources to estimate volume and capacity. • When solving problems convert between units of time. • When solving problems use all four operations to solve problems involving measures using decimal notation and scaling.	• When solving problems that require the calculation that conversion of units of measures, use decimal notation up to three decimal places. • Know how to convert between miles and km. • Investigate the relationship between area and perimeter identifying examples where the same area can have the same perimeter and vice versa. • Use the formulae for area and volume of shapes. • Know how to calculate the area of parallelograms and triangles. • Be able to calculate estimate and compare the volume of cubes and cuboids using standard units. (cm³, m³).
Geometry – properties of shape.	• Accurately draw 2D shapes. • Recognise 3D shapes in different orientations. • Know that angles are a property of shapes and can be used to describe turns. • Accurately recognise right angles including a complete turn. • Begin to identify whether angles are greater/less than a right angle. • Begin to use the terms horizontal, vertical, perpendicular and parallel to describe pairs of lines.	• Use the properties of shape to compare and classify geometric shapes. • Understand and use the terms acute and obtuse to identify angles. • Make observations to order angles up to two right angles by size. • Recognise lines of symmetry in 2D shapes presented in different orientations.	• Use the terms acute, obtuse and reflex to estimate and compare angles. • Know how to identify 3D shapes from 2D representations. • Accurately draw and measure angles in degrees. • Know how to use the properties of rectangles to find missing lengths and angles. • Use knowledge of sides and angles to distinguish between regular and irregular polygons.	• Use given dimensions and angles to draw 2D shapes. • Construct 3D shapes including making nets. • Know how to find unknown angles in triangles, quadrilaterals and regular polygons. • Solve missing angle problems on straight lines. • Use the knowledge of shape properties to classify geometric shapes. • Know and use the parts of circles (radius, diameter and circumference).
Geometry- position and direction.	•	• Know how to use coordinates to describe position in the first quadrant and plot specified points. • Use knowledge of coordinates and shape to complete a given polygon. • Use translation horizontally and vertically to describe movement.	• Know how to successfully reflect and translate shapes.	• Know how to use coordinates to describe position in all four quadrants and plot specified points. • Know how to draw and translate shapes on the coordinate plane. • Know how to reflect simple shapes in the axes of the coordinate plane.
Statistics	• Use bar charts, pictograms and tables to present and interpret data. • Use information in scaled bar charts, pictograms and tables to solve one-step and two-step questions.	• Use bar charts and time graphs to present discrete/continuous data. • Use bar charts, pictograms, tables and other graphs to solve comparison sum and difference problems.	• Use line graphs to solve comparison, sum and difference problems. • Identify the necessary information in tables (including timetables) and be able to complete them.	• Know how to construct a pie chart and line graph. • Use pie charts and line graphs to solve problems. • Understand the term mean as an average and be able to calculate it.