Maths Year 2 Annual Overview
Whitehouse Primary School

	Autumn	Spring	Summer
Week 1	Number and Place Value: Numbers to 100	Statistics: Picture Graphs	Measurement : time
Week 2	Number and Place Value: Numbers to 100	Review and Revision	Measurement: time / Volume
Week 3	Calculations: Addition and Subtraction	Calculations: More word Problems	Measurement: Volume
Week 4	Calculations: Addition and Subtraction	Measurement: Money	Review and Revisit Topics / SATS
Week 5	Calculations: Multiplication of 2, 5 and 10	Measurement: Money	Review and Revisit Topics / SATS
Week 6	Calculations: Multiplication of 2, 5 and 10	Geometry: Properties of Shapes 2D	Review and Revisit Topics / SATS
Week 7	Calculations: Multiplication and Division of 2, 5 and 10	Geometry: Properties of Shape 2D	Review and Revisit Topics
Week 8	Calculation: Multiplication and Division of 2,5, and 10	Geometry: Properties of Shapes: 3D	Review and Revisit Topics
Week 9	Measurement: Length	Fractions: Fractions	Revision and End of Year assessments
Week 10	Measurement: Length	Fractions: Fractions	Review and Revise Topics
Week 11	Measurement: Mass	Fractions: Fractions	Review / Revision
Week 12	Measurement: Temperature	Review and Revise	Review / Revision

Autumn Term			
Strand	**National Curriculum Objectives**	**Focus**	**Sequence**
Number and Place Value	• Use place value and number facts to solve problems • Recognise the place value of each digit in a two-digit number (tens, ones) • Identify, represent and estimate 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 words • Count in steps of 2,3 and 5 from 0, and in 10s from any number, forward and backwards	Numbers to 100	• To count numbers up to 100 using concrete objects: counting up by ones and tens. • Place Value: To understand each digit in a number has its own value. • Comparing Numbers :To be able to compare numbers using place-value knowledge gained from previous lessons. • Number Bonds: To use the number bond strategy to deepen understanding of place value. • Number Patterns :To count in ones and tens; to introduce boundary crossing using tens and ones. • Number Patterns: To recognise and describe patterns with more complex numbers, in particular 3 and 5. • To use place-value knowledge to think about the effects of each digit in a number.
Calculations	• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts to 100 • Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another number can not • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers • Recognise and use the inverse relationship between addition and subtraction and use this to check	Addition and Subtraction	• To be able to add a 1-digit number to a 2-digit number without regrouping the ones. • Simple Adding: To add tens by recognising its relationship to adding ones. • Simple Adding: To add 2-digit numbers where one is a multiple of 10. • Simple Adding: To add with tens and ones where the ones are both more than zero. • Adding with Renaming: To add 1-digit numbers to a 2-digit number resulting in renaming of ones. • Adding with Renaming: To add two 2-digit numbers where renaming is expected. • Simple Subtracting: To subtract ones from a 2-digit number. • Simple Subtracting: To subtract 2-digit multiples of 10 from 2-digit multiples of 10. • Simple Subtracting: To subtract tens from a 2-digit number with the ones being more than zero.

	calculations and solve missing number problems • 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		• Simple Subtracting: To subtract a 2-digit number by another 2-digit number. • Subtracting with Renaming: To subtract a 2-digit number by a 1-digit number with renaming. • Subtracting with Renaming: To subtract a 2-digit number by another 2-digit number where renaming has to occur. • Addition of Three Numbers: To add three 1-digit numbers.
Calculations	• 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 with the multiplication tables and write them using (x), division (÷), and equals (=) signs • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another number cannot	Multiplication of 2,5 and 10	• To realise that multiplication is the same as repeated addition with equal groups. • 2 Times Table: To focus on understanding and learning the 2 times table. • 2 Times Table: To use concrete materials and pictorial representations to multiply by 2. • 5 Times Table: To cover the basics of the 5 times table and to highlight multiplication visually as equal groups. • 5 Times Table: To recall and use the 5 times table. • 10 Times Table :To introduce the 10 times table by focusing on the numbers found in the 10 times table. • 10 Times Table: To look at the 10 times table in more detail by looking at patterns and relationships. • Multiplying by 2, 5 and 10: To investigate links between the 2, 5 and 10 times tables. To understand commutative law. • Multiplying by 2, 5 and 10: To use knowledge of the 2, 5 and 10 times tables to further investigate commutative law. • Solving Word Problems :To use the 2, 5 and 10 times tables to solve word problems.
Calculations	• 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 with the	Multiplication and Division of 2,5, and 10	• To understand that grouping is a way of dividing. • Sharing: To be able to divide by sharing an amount. • Dividing by 2: To be able to divide by 2. The two strategies used here are splitting into groups of x and splitting into equal groups of many. • Dividing by 5: To be able to divide by 5 and identify links with multiplying by 5.

	multiplication tables and write them using (x), division (÷), and equals (=) signs • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another number cannot		• Dividing by 10: To be able to divide by 10 and identify links with multiplying by 10. • Multiplication and Division: To use multiplication and division skills to identify family facts in a number sentence. • Solving Word Problems: To understand and solve word problems which require the use of the multiplication and division skills covered in this chapter. • Odd and Even Numbers: To be able to link whether odd or even numbers can be divisible by 2, 5 or 10. • Consolidation: To use multiplication and division knowledge in problem solving and to create equations from questions.
Measurement	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to nearest appropriate unit, using ruler and scales • Compare and order length and record the results using >,<, and =	Length	• To measure length in metres. • Measuring Length in Centimetres: To measure length in centimetres. • Comparing Length in Metres: To be able to compare length for objects using 'greater than' and 'less than' symbols. • Comparing Length in Centimetres: To be able to compare different lengths using centimetres as the unit of measure. • Comparing the Length of Lines: To be able to compare and measure various line lengths: both straight and curvy. • Solving Word Problems: To be able to solve problems involving measurement in the context of word problems. • Solving Word Problems: To be able to solve addition and multiplication word problems involving measurement. • Solving Word Problems: To be able to solve addition and division word problems involving measurement. consolidation To practise various concepts covered
Measurement	• choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	Mass	• Measuring Mass in Kilograms: To understand that mass is measured in kilograms and by using weighing scales. • Measuring Mass in Grams: To be able to measure mass in grams and to understand that it is a smaller unit of measure than a kilogram.

	• Compare and order mass and record the results using >,< and =		• Measuring Mass in Grams: To be able to measure mass accurately in grams using weighing scales. • Comparing Masses of Two Objects: To be able to compare the mass of two different objects accurately. • Comparing the Mass of Three Objects: To be able to compare the mass of three objects and use the appropriate vocabulary. • Solving Word Problems: To solve word problems in the context of mass. Solving More Word Problems: To solve word problems involving mass.
Measurement	• Choose and use appropriate standard units to measure capacity (litres / ml) and temperature (^{o}C) to the nearest appropriate unit, using scales, thermometers and measuring vessels	Temperature	• Reading Temperature: To be able to accurately read temperature in Celsius. • Estimating temperature: To be able to estimate temperature and to read thermometers to confirm the estimate.

Spring Term			
Strand	**National Curriculum Objectives**	**Focus**	**Sequence**
Statistics	• 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 categories by quantity • ask and answer questions about totalling and comparing categorical data	Picture Graphs	• To be able to read a picture graph with confidence. • To be able to read and interpret a picture graph with confidence. • To be able to read and interpret a picture graph where the value of the picture can represent more than 1. • To be able to read and interpret a picture graph where the value of the picture can represent more than 1. • To be able to read, interpret and create a picture graph where the value of the picture can represent more than 1.
Calculations	• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts to 100	More Word Problems	• To decide when it is appropriate to add and/or subtract when solving word problems; to improve the use of bar modelling and decision making based on visual representations.

	• Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another number can not • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems • 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		• To use the bar model method to solve word problems looking at the difference between two amounts. • To solve multi-step word problems using bar modelling; to use more than one bar model in a problem to work out the answer. • To use bar modelling to solve multi-step word problems involving unknown quantities.
Measurement	• 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 amount of money • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change •	Money	• Writing Amounts of Money: To identify standard UK coins and notes and write their names. • Counting Money: To count notes in sequences of 5 and 10; to recognise the value of notes by appearance. • Counting Money: To count coins in sequences of their value; to recognise the value of coins by appearance. • Counting Money :To represent amounts of money using coins and notes; to count coins and notes using their denominations. • Showing Equal Amounts of Money: To create equal amounts of money using different coins.

			• Exchanging Money: To exchange denominations of money for different coins. • Comparing Amounts of Money: To compare different amounts of money using coins. • Calculating Total Amount: To add money together to determine the total amount. • Calculating Change: To calculate change from £100 or less; to use the bar model approach to represent amounts of money. • Solving Word Problems: To solve more complex word problems using bar modelling as a primary method.
Geometry – Properties of Shape	• Identify and describe the properties of a 2-D shape, including the number of sides and symmetry of a vertical line • Identify and describe the properties of a 3-D shape, including the number of edges, vertices and faces • Identify 2-D shapes on the surface of a 3-D shape (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 • 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 distinguished between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anticlockwise)	2D shapes	• Identifying Sides: To identify the number of sides on basic 2-D shapes. • Identifying Vertices: To identify and count the vertices in regular polygons. • Identifying Lines of Symmetry: To identify lines of symmetry in basic 2-D shapes. • Making Figures: To construct shapes using pattern blocks that have lines of symmetry. • Sorting Shapes: To sort shapes based on number of sides, vertices and other factors. • Drawing Shapes: To draw shapes using square grid and dot grid paper; to copy shapes from sight using grid paper. • Making Patterns: To recognise patterns of familiar shapes and colours of up to three objects. • Describing Patterns: To describe patterns using ordinal numbers and shape names. • Moving Shapes: To move shapes on a square grid from one position to another using common language. • To turn objects using quarter, half and three-quarter turns both clockwise and anticlockwise on a square grid.

Geometry – Properties of Shape	• Identify and describe the properties of a 2-D shape, including the number of sides and symmetry of a vertical line • Identify and describe the properties of a 3-D shape, including the number of edges, vertices and faces • Identify 2-D shapes on the surface of a 3-D shape (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 • Order and arrange combinations of mathematical objects in patterns and sequences •	3D shapes	• To recognise 3-D shapes by identifying their properties. • Describing Three-Dimensional Shapes: To describe 3-D shapes and classify them using faces, vertices and edges. • Describing Three-Dimensional Shapes: To describe 3-D shapes based on the number of faces and the 2-D shapes of these faces; to construct nets of shapes into 3-D shapes. • Grouping Three-Dimensional Shapes: To group 3-D shapes by similar properties. • Forming Three-Dimensional Structures: To form 3-D structures using multiple 3-D objects. • Making Patterns: To make and recognise patterns using 3-D shapes. • Consolidation: To practise various concepts covered in the chapter.
Fractions	• Recognise, find, name and write fractions ⅓, ¼, 2/4, and ¾ of a length, shape, set of objects or quantity Write simple fractions for example, ½ od 6 = 3 and recognise the equivalence of 2/4 and ½	Fractions	• Making Equal Parts: To make equal parts from a whole using simple and complex methods. • Showing Half and Quarter: To show and recognise halves and quarters. • Showing Quarters: To show and identify more than one quarter using materials and pictures. • Showing Thirds: To show and identify thirds in shapes; to use the vocabulary 'numerator' and 'denominator' when referring to fractions. • Naming Fractions: To identify and name fractions by looking at the number of pieces and how many are shaded in. • Making Equal Fractions: To recognise equivalent fractions in quarters, thirds and halves. • Comparing and Ordering Fractions: To compare and order similar fractions by looking at the size of the pieces shaded. • Comparing and Ordering Fractions: To compare and order fractions with different denominators.

			• Counting Wholes and Parts :To count the number of wholes and parts to form mixed numbers. • Counting in Halves: To count in halves and place halves onto a number line using pictures. • Counting in Quarters: To count in quarters and place quarters onto a number line using pictures. • Counting in Thirds: To count in thirds and place thirds onto a number line using pictures. • Finding Part of a Set: To find fractions (half) of whole numbers. • Finding Part of a Set: To find a fraction (third) of a whole number. • Finding Part of a Set: To find a fraction (quarter) of a number. • Lesson 16 – Finding Part of a Quantity To find a fraction (half, third, quarter) of a quantity (length).

Summer Term			
Strand	**National Curriculum Objectives**	**Focus**	**Sequence**
Measurement	• 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 • Compare and sequence intervals of time	Time	• Telling and Writing Time to 5 Minutes: To tell and write time to 5-minute intervals. • Telling and Writing Time: To tell time to 5-minute intervals and to the hour. • Sequencing Events: To sequence events of the day by looking at analogue clocks and pictures. • Drawing Clock Hands: To draw hands on an analogue clock to show the correct time. • Finding Durations of Time: To find the duration of time using an analogue clock in 30- and 60-minute intervals. • Finding Durations of Time: To find the duration of time to 5-minute intervals. • Finding Ending Times: To find the ending of a duration of time from different 5-minute starting points.

			• Finding Ending Times: To find the ending time in intervals of 5 minutes from delayed starts. • Finding Starting Times: To find the starting time from 30-minute and 1-hour interval durations. • Finding Starting Times: To find the start of multiple durations of time using a common end time. • Comparing Time: To compare durations of time from the least amount to the most amount of time and vice versa.
Measurement	Choose and use appropriate standard units to estimate and measure capacity (litres / ml) and temperature (^{o}C) to the nearest appropriate unit, unit scales, thermometers and measuring vessels • Compare and order volume and capacity and record the results using >,<, and =	Volume	• To compare volume in different-sized containers using the terms 'greater than,' 'less than,' 'greatest' and 'least.' • Comparing Volume: To compare the volume of different containers using non-standard units. • Measuring Volume in Litres: To measure volume using litres and determine whether an amount is 'more than,' 'less than' or 'equal to' a litre. • Measuring Volume in Millilitres: To measure volume using millilitres and litres; to determine how many ml there are in 1 l. • Solving Word Problems: To solve word problems involving bar models with litres as the standard unit. • Solving Word Problems: To solve word problems using ml and l, including problems involving difference. • Solving Word Problems: To solve word problems involving volume and multiplication.