

# Diamond Year 3/4 Medium Term Maths Plan

-Differentiation by input see the weekly planning sheet/  
 -Key vocab for each learning objective is in red font /  
 -Resources -see the weekly planning /  
 -Minimum Assessment for Learning strategies for all topics = Peer Talk; targeted questioning; mini white boards; and self and peer marking  
 - Long term memory development strategies= Recapping previous learning at the start of each new topic / Long term memory strategy linked to the objectives on this sheet for each week  
 -Mathematics Cultural Capital = Applying maths investigative Skill and problem-solving skills = Try to embed these into all lessons – where applicable

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<b>The learning objectives must be taught in the numbered order.</b>							
Autumn first half	<b>Number and Place Value</b> <b>Learning Objectives</b> LO 1: read and write numbers up to 4 digits in numerals and words. LO 2: Recognise the place value of each digit in a 4-digit number. LO 3: order and compare numbers beyond a 1000 LO 4: find 1000 more or less than a given number.	<b>Addition</b> LO 1: Add numbers with up to 4 digits using formal written methods of columnar addition. LO 2: Add numbers mentally including a three digit number and ones, tens and hundreds. LO 3: Estimate and use inverse operations to check answers to a calculation.	<b>Subtraction</b> LO 1: Subtract numbers with up to 4 digits using formal written methods of columnar subtraction. LO 2: Subtract numbers mentally including a three-digit number and ones, tens and hundreds LO 3: Estimate and use inverse operations to check answers to a calculation.	<b>Multiplication</b> LO 1: Recall multiplication facts for multiplication tables up to 12 x 12. LO 2: multiply two-digit and three-digit numbers by a one-digit number using formal written layout. LO 3: Solve problems involving multiplication.	<b>Division</b> LO 1: Recall division facts for multiplication/division tables up to 12 x 12. LO 2: write and calculate mathematical statements for division using the tables they know progressing to formal methods. LO 3: Solve problems involving division.	<b>Fractions</b> LO 1: Recognise, find and write fractions of a discrete set of objects and begin to use quantities. LO 2: Recognise and use fractions as numbers LO 3: Recognise and show, using diagrams, equivalent fractions with small denominators. LO 4: Recognise and show, using diagrams, families of common equivalent fractions.	<b>Assessment, Review and Consolidation</b>
Autumn second half	<b>Decimals</b> LO 1: Count up and down in tenths, recognising that tenths arise from dividing an object into ten equal parts. LO 2: Recognise and write decimal equivalents of any number of tenths or hundredths. LO 3: Recognise and write decimal equivalents to $\frac{1}{2}$ $\frac{1}{4}$	<b>Measure-Length</b> LO 1: Measure, compare, add and subtract lengths (m, cm, mm) LO 2: Convert between different units of measure e.g. kilometre to metre. LO 3: Measure the perimeter of simple 2D shapes LO 4: Measure and calculate the perimeter of rectilinear figure (including squares) in centimetres and metres.	<b>Measure-Time</b> LO 1: Tell and write the time from an analogue clock, using Roman numerals and 12-hour and 24-hour clocks. LO 2: Estimate and read time with increasing accuracy to the nearest minute. LO 3: Record and compare time in terms of seconds, minutes, hours. LO 4: Use vocabulary such as o'clock, a.m/p.m, morning, afternoon, noon and midnight.	<b>Addition and Subtraction</b> LO 1: Pupils continue to practise both mental and columnar addition and subtraction with increasingly large numbers to aid fluency. LO 2: Estimate and use inverse operations to check answers to a calculation. LO 3: Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use.	<b>Statistics</b> LO 1: Interpret and present data using bar charts, pictograms and tables. LO 2: Solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables.	<b>Geometry-2D shapes</b> LO 1: Draw 2-D shapes and identify horizontal and vertical lines and pairs of perpendicular and parallel lines. LO 2: Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.	<b>Assessment, Consolidation and Review</b>
Spring first half	<b>Number and Place Value</b> LO 1: Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones) LO 2: Round any number to the nearest 10, 100 and 1000. LO 3: Solve number and practical problems that involve rounding and place value using increasingly large numbers.	<b>Multiplication</b> LO 1: Recall multiplication facts for multiplication tables up to 12 x 12. LO 2: Recognise and use factor pairs and commutativity in mental calculations. LO 3: Multiply two-digit and three-digit numbers by a one-digit number using the formal written method.	<b>Division</b> LO 1: Pupils practise to become more fluent in the formal written methods of short division with exact answers. LO 2: Find the effect of dividing a one or two-digit number by 10 and 100, identifying the value of the digits as ones, tenths and hundredths.	<b>Geometry 3D shapes</b> LO 1: Draw and make 3-D shapes using modelling materials. LO 2: They should be able to describe the properties of 3-D shapes using accurate language. LO 3: Recognise 3-D shapes in different orientations and describe them.	<b>Geometry-Position and direction</b> LO 1: Describe positions on a 2-D grid as co-ordinates in the first quadrant. LO 2: Describe movements between positions as translations of a given unit to the left/right and up/down. LO 3: Plot specified points and draw sides to complete a given polygon.	<b>Money</b> LO 1: Pupils continue to become fluent in recognising the value of coins. LO 2: they are able to add and subtract amounts including mixed units, and giving change using manageable amounts. LO 3: They are able to record £ and p separately.	
Spring second half	<b>Addition</b> LO 1: Pupils continue to practise both mental and columnar addition with increasingly large numbers to aid fluency. LO 2: Estimate and use inverse operations to check answers to a calculation. LO 3: Solve addition two-step problems in contexts deciding which operation to use.	<b>Subtraction</b> LO 1: Pupils continue to practise both mental and columnar subtraction with increasingly large numbers to aid fluency. LO 2: Estimate and use inverse operations to check answers to a calculation. LO 3: Solve subtraction two-step problems in contexts deciding which operation to use.	<b>Fractions</b> LO 1: They continue to recognise fractions in the context of parts of a number, whole, measurements, a shape, and unit fractions as division of quantity. LO 2: Add and subtract fractions with the same denominator within a whole and extending to beyond one.	<b>Decimals</b> LO 1: Pupils connect tenths to place value, decimal measures and to division by 10. LO 2: Find the effect of dividing a one or two-digit number by 10 and 100 identifying the digits as ones, tenths and hundredths.	<b>Measurement-Area and perimeter</b> LO 1: Convert between different units of measurement mm, cm, m LO 2: Measure the perimeter of simple 2-D shapes. LO 3: Find the area of rectilinear shapes by counting squares.	<b>Statistics</b> LO 1: Interpret and present discrete and continuous data using the appropriate graphical methods including bar charts and time graphs. LO 2: Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	<b>Assessment, Consolidation and Review</b>
Summer first half	<b>Number and Place Value</b> LO 1: Count backwards through zero to include negative numbers. LO 2: 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. LO 3: Solve number and practical problems that involve negative numbers and Roman numerals using increasingly large numbers.	<b>Multiplication/Division</b> LO 1: Recall and use multiplication and division facts for up to 12 x 12 LO 2: Multiply two-digit and three-digit numbers by a one-digit number using the formal written method. LO 3: Pupils practise to become more fluent in the formal written methods of short division with exact answers.	<b>Money</b> LO 1: they are able to add and subtract amounts including mixed units, and giving change using manageable amounts. LO 2: Solve simple money problems involving fractions and decimals places up to two decimal places. LO 3: Pupils build on their understanding of place value and decimal notation to record money.	<b>Measure-Time</b> LO 1: Pupils use both analogue and digital 12-hour clocks and record their times. LO 2: Read, write and convert time between analogue and digital 12 and 24 hour clock.	<b>Geometry-Angles</b> LO 1: Recognise angles as a property of shape or a description of a turn. LO 2: identify right angles, identify whether angles are greater than or less than a right angle. LO 3 Identify acute and obtuse angles and compare and order angles up to two right angles by size.	<b>Geometry-Position and Direction</b> LO 1: Describe positions on a 2-D grid as co-ordinates in the first quadrant. LO 2: Describe movements between positions as translations of a given unit to the left/right and up/down. LO 3: Plot specified points and draw sides to complete a given polygon.	<b>Statistics</b> LO 1: Interpret and present discrete and continuous data using the appropriate graphical methods including bar charts and time graphs. LO 2: Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
Summer second half	<b>Addition/Subtraction</b> LO 1: Pupils continue to practise both mental and columnar subtraction and addition with increasingly large numbers to aid fluency. LO 2: Estimate and use inverse operations to check answers to a calculation. LO 3: Solve addition and subtraction two-step problems in contexts deciding which operation to use.	<b>Multiplication/Division</b> LO 1: Recall and use multiplication and division facts for up to 12 x 12 LO 2: solve problems involving multiplying and dividing, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	<b>Fractions/Decimals</b> LO 1: Round decimals with one decimal place to the nearest whole number. LO 2: Compare numbers with the same number of decimal places up to two decimal places. LO 3: Practise counting using simple fractions and decimal, both forwards and backwards.	<b>End of Year Assessment week</b> Year 3 and 4 NFER assessments-Arithmetic, Reasoning1 and 2	<b>Measurement Weight/Length/Capacity</b> LO 1: Measure, compare, add and subtract lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) LO 2: Comparing and using mixed units of measurement and simple equivalents of mixed units. LO 3: Comparison of measures include simple scaling by integers and this connects to multiplication.	<b>Statistics</b> LO 1: Interpret and present discrete and continuous data using the appropriate graphical methods including bar charts and time graphs. LO 2: Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	<b>Assessment, Consolidation and Review</b>

