Year 4: Maths Long Term Plan

THE PYTHON HILL ACADEMY

LABOR OMNIA VINCIT

Our Ambition: To be the highest performing MAT in the country
Our Mission: To improve the communities we serve for the better

Vision:

Challenging educational orthodoxies so that every child makes good progress in all subjects;
all teachers are committed to personal improvement and fulfil their responsibilities;
all children receive an inspiring curriculum;
all academies strive to be outstanding.

Mathematics Long Term Planning Support: Year 4

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn 1	**Place Value** 4 weeks				**Number: Addition and Subtraction** 3 weeks		
	• 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). • Find 1000 more or less than a given number. • Order and compare numbers beyond 1000. • Round any number to the nearest 10, 100 or 1000. • Solve number and practical problems that involve all of the above and with increasingly large positive numbers. • Count backwards through zero to include negative 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.				• Add numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. • Subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. • Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why. • Estimate and use inverse operations to check answers to a calculation.		

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Autumn 2	**Measurement: Length and Perimeter** 2 weeks		**Number: Multiplication and division** 3 weeks			**Consolidation & assessment week** 2 weeks
	• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. • Convert between different units of measure [for example, kilometre to metre].		• Recall and use multiplication and division facts for multiplication tables up to 12 × 12 (strategies for working out times tables e.g. double 4 lots to find 8 lots). • 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. • Recognise and use factor pairs and commutativity in mental calculations. • Multiply 2 & 3 digit numbers by a single digit including using the formal written method. • Divide a 2 & 3 digit numbers by a single digit including using the formal written method.			• Address gaps from gap analysis.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Spring 1	**Number: Multiplication and Division** 3 weeks			**Measurement: Area** 1 week	**Number: Fractions** 2 weeks	
	• Solve problems involving multiplying and adding, 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.			• Length and Perimeter Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. • Convert between different units of measure [for example, kilometre to metre].	• Recognise and show, using diagrams, families of common equivalent fractions. • Add and subtract fractions with the same denominator.	

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Spring 2	**Number: Fractions** 2 weeks		**Number: Decimals** 3 weeks			**Consolidation & assessment week** 1 week
	• Count up and down in hundredths • Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. • 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.		• Recognise and write decimal equivalents of any number of tenths or hundredths. • Compare numbers with the same number of decimal places up to two decimal places. • Round decimals with one decimal place to the nearest whole number. • Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths.			• Address gaps from gap analysis.

	Week 1	Week 2	Week 3	Week 4	Week 5
Summer 1	**Number: Decimals** 2 weeks		**Measurement: Money** 2 weeks		**Consolidation & assessment week** 1 week
	• Recognise and write decimal equivalents to 1/4, 1/2 and 3/4. • Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths. • Solve simple measure and money problems involving fractions and decimals to two decimal places. • Convert between different units of measure [for example, kilometre to metre].		• Estimate, compare and calculate different measures, including money in pounds and pence. • Solve simple measure and money problems involving fractions and decimals to two decimal places.		Address gaps from gap analysis.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Summer 2	**Measurement: Time** 2 weeks		**Measurement: Statistics** 1 weeks	**Geometry: Properties of Shape** 2 weeks		**Geometry: Position and direction** 2 weeks	
	• Convert between different units of measure [for example, kilometre to metre; hour to minute]. • Read, write and convert time between analogue and digital 12 and 24-hour clocks. • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.		• 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.	• Identify acute and obtuse angles and compare and order angles up to two right angles by size. • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. • 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.		• Describe positions on a 2-D grid as coordinates in the first quadrant. • Plot specified points and draw sides to complete a given polygon. • Describe movements between positions as translations of a given unit to the left/ right and up/ down.	