Acton CE Primary Academy Long Term Overview – Singapore Maths

EYFS Overview		
Autumn	Spring	Summer
Number: Recognise some numerals of personal significance. Recognises numerals 1 to 5. Counts up to three or four objects by saying one number name for each item. Counts actions or objects which cannot be moved. Counts objects to 10, & beginning to count beyond 10. Counts out up to six objects from a larger group. Selects the correct numeral to represent 1 to 5, then 1 to 10 objects. Counts an irregular arrangement of up to ten objects. Estimates how many objects they can see & checks by counting them. Numerical Patterns Uses the language of 'more' & 'fewer' to compare two sets of objects. Says the number that is one more than a given number. Finds one more or one less. Finds one more or one less from a group of up to five objects, then ten objects. Shape, Space and Measure: Selects a particular named shape. Can describe their relative position such as 'behind' or 'next to'. Uses familiar objects & common shapes to create & recreate patterns & build models	Number: Sequence numbers 1-10 in correct order Can subitise (recognise without counting) numbers up to 5 Finds the total number of items in two groups by counting all of them- using manipulatives and ten frames. In practical activities and discussion, beginning to use the vocabulary involved in adding & subtracting. Records, using marks that they can interpret and explain. Numerical Patterns: Compare groups of objects and make simple observations using the language 'more', 'less', 'greater' and 'fewer'. Creates patterns using manipulative and explore number patterns Shape Space and Measure: Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, & mathematical terms to describe shapes. Orders two or three items by length or height. Beginning to use everyday language related to money. Measures short periods of time in simple ways. Uses everyday language related to time. Orders & sequences familiar events. Orders two items by weight or capacity. Begins to identify own mathematical problems based on own interests & fascinations.	Number: Children have a deep understanding of numbers to 10 including the composition of each and form each number with manipulative and a numerical. Children place numbers 1-20 in order them in order and say which number is one more or one less than a given number. Using quantities & objects, they add & subtract two single digit numbers & count on or back to find the answer. They solve problems, including doubling, halving & sharing. Automatically recall number bonds to 10. Number Patterns: Children count reliably with numbers from one to 20 and beyond Explore evens and odds Begin to develop understanding of doubles and how qualities can be shared evenly. Compare groups of objects and make observations using the language the 'same' 'more', 'less', 'greater' and 'fewer'. Shape, Space and Measure: Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create & describe patterns. They explore characteristics of everyday objects & shapes & use mathematical language to describe them. Manipulate shapes to develop spatial reasoning skills.

Year 1 Overview			
Autumn Where in the world is Acton?	Spring Our Feathered Friends	Summer 1 Afternoon Tea with the Royals	Summer 2 Commotion in the Ocean
• I can count to 10 • I can read and write numbers from 0-10 • I can compare and order numbers from 0-10 • I can make different number bonds for numbers up to 10 • I can make number stories • I can add by counting • I can add by counting on • I can make addition equations • I can subtract by crossing out • I can subtract using number bonds • I can subtract by counting back • I can make subtraction stories • I can solve missing number problems such as 7 = ?– 9 (extra) • I can name positions in a race and in a queue • I can name positions from the left and from the right • I can use the words before, after, next to, last, between in order to name positions • I can count to 20 • I can read and write numbers from 11-20 • I can compare and order numbers within 20 • I can complete number patterns	• I can recognise and name common 2-D shapes • Recognise and name common 3-D shapes. • I can look for shapes in solids • I can group shapes • I can make and complete patterns with shapes • I can compare, describe and solve practical problems for length and height • I can measure and record length and height • I can count in multiples of 2's, 5's and 10's • I can count within 40 • I can read and write numbers from 21-40 • I can use a place value chart to show numbers in tens and ones • I can compare and arrange numbers within 40 • I can find how much more • I can complete number patterns • Solve one-step problems involving addition and subtraction, using concrete objects and pictorial representations • I can make equal groups • I can add equal groups to find the total number of objects • I can solve problems about multiplication • I can group things equally • I can share things equally	• I can show half • I can show a quarter • Recognise, find and name a half as one of two equal parts of an objects, shape or quantity. • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. • I can count to at least 100 forwards and backwards from any given number • I can count, read and write numbers to 100 • I can count in 2s, 5s and 10s to 100 • I can identify one more and one less from any given number up to 99 • I can compare and arrange numbers within 100 • Tell the time to the hour and half past the hour • I can compare different times • I can recognise dates on a calendar • I can recognise and use language relating to days • I can recognise and use language relating to days of the week. • I can recognise and use language relating to weeks, months and years. • Recognise and know the values of different denominations of coins and notes • I can compare volume and capacity	

			• I can use half and a quarter to describe volume • I can find volume and capacity • I can compare mass of objects • I can find mass of objects • I can describe positions • I can describe movements • I can describe turns • I can collect data (extra)	

Year 2 Overview

Autumn 1 The British Isles	Autumn 2 Behind Enemy Lines (George VI 1936-52)	Spring 1 Fun at the Fair	Spring 2 How does your Garden Grow?	Summer 1 How does your Garden Grow?	Summer 2 Water World
• I can recall and use addition and subtraction facts to 20 • Recognise and use the inverse relationship between addition and subtraction • I can read and write numbers to at least 100 in numerals and in words • I can compare and arrange numbers within 100 • I can make and complete number patterns • I can add numbers with renaming • I can add numbers without renaming • I can subtract numbers with renaming • I can subtract numbers without renaming • I can add three numbers • Recall and use multiplication and division facts for the 2 times table • Recall and use multiplication and division facts for the 5 times table • Recall and use multiplication and division facts for the 10 times table • I can write multiplication equations		• I can measure mass in kilograms • I can measure mass in grams • I can compare and order mass • I can solve word problems involving mass • I can read a thermometer • I can measure and write down the temperature • I can draw pictograms, tally charts, block diagrams and simple tables • I can read information from pictograms, tally charts, block diagrams and simple tables • I can solve problems using information from pictograms, tally charts, block diagrams and simple tables • I can draw models for different situations • I can solve word problems • I can name coins and notes • I know how to count to tell the amount of money • I can show amounts of money in different ways		• I can make and show halves, quarters and thirds • I can name and write a fraction • I can name fractions that make a whole • I can compare and order fractions • I can count wholes with halves, quarters and thirds • I can find part of a set and a quantity • I can write simple fractions for example ½ of 6 = 3. • I can tell and write the time to 5 mins • I can draw hands on a clock face to show the time • I can find the duration of time • I can find the ending or starting time • I can compare and sequence intervals of time • I know the number of minutes in an hour • I know the number of hours in a day • I can compare volume • I can measure volume in litres and millilitres • I can solve word problems on volume	

- I Know that the multiplication of two numbers can be done in any order
- I Know that division of one number by another cannot be done in any order.
- I can solve problems involving multiplication and division
- I can write a family of multiplication and division facts
- I can solve addition and subtraction word problems
- I can recognise odd and even numbers
- I can measure length in metres
- I can measure length in centimetres
- I know when to use cm or m to measure length
- I know how to order and compare length
- I know how to measure and draw lines
- I know how to solve word problems involving length

- I can exchange coins and notes
- I can compare amounts of money
- I can calculate change
- I can solve word problems on money
- I can name triangles, quadrilaterals and polygons
- I can identify the number of sides and vertices of a shape
- I can identify the lines of symmetry of a shape or figure
- I can form different figures with shapes
- I can name the shapes that make up a figure
- I can sort shapes
- I can draw figures on a square grid and a dot grid
- I can make and complete patterns
- I can tell how patterns are formed from shapes
- I can move shapes
- I can turn shapes
- I can recognise flat faces and curved surfaces
- I can name and describe spheres, cuboids, cubes, cylinders, cones, pyramids and prisms
- I can identify the number of faces, edges, vertices of a shape
- I can fold 2D shapes into 3D shapes
- I can group shapes in different ways
- I can form structures with shapes
- I can make patterns with shapes

Year 3 Overview

Autumn 1	Autumn 2	Spring	Summer
A Passport to Europe	The Penny Black Queen Victoria (1837-1901)	Reduce, Reuse, Recycle	Ready, Steady, Cook
- I can count to 1000, writing in numerals and words. - I can count in hundreds, tens and ones - I can find 10 more or 10 less than a given number - I can count in fifties - I can count in fours and eights. - I can tell the value of a digit in a number. - I can compare and arrange numbers within 1000. - I can complete number patterns. - I can add numbers up to three digits using an appropriate method - I can add numbers mentally - I can subtract numbers up to three digits using an appropriate method - I can subtract numbers mentally - I can solve word problems involving adding and subtracting. - I know my 3,4 and 8 times table by heart - I can divide by 3, 4 and 8 - I can solve multiplication problems involving 3,4,and 8 times tables - I can solve division problems involving 3,4,and 8 times tables - I can multiply a 2 digit number by a 1 digit. - I can multiply with regrouping - I can multiply without regrouping - I can divide a 2 digit number by a 1 digit number - I can divide with regrouping - I can divide without regrouping.		- I can write length in m and cm - I can convert between m and cm - I can write lengths in km and m - I can convert between km and m - I can compare different lengths - I can solve length word problems (add and subtract). - I can read scales for mass in kg and g - I can solve mass word problems (add and subtract). - I can measure volume in ml and l - I can measure capacity in ml and l - I can write volume in ml and l - I can write capacity in ml and l - I can solve volume and capacity word problems (add and subtract). - I can name an amount of money in pounds and pence - I can use different ways to show the same amount of money - I can add money in pounds and pence - I can subtract money in pounds and pence - I can calculate change - I can solve word problems involving money. - I can tell and write the time in am and pm - I can tell and write the time using past and to - I can tell and write the time shown on different types of clocks - I can measure time in seconds, hours and minutes	- I can draw picture graphs and bar graphs - I can read and interpret bar graphs - I can solve problems using information from bar graphs. - I can count in tenths - I can make number pairs that form one whole - I can add and subtract two fractions - I can find and list equivalent fractions - I can write a fraction in its simplest form - I can compare and order fractions - I can find part of a set and fraction of a number - I can share a number equally - I can write fractions on the number line. - I can write fractions that are greater than 1 - I can solve word problems involving fractions. - I can recognise an angle - I can find angles in shapes - I can find a right angle, acute angle and obtuse angle - I can make a half turn, three-quarters and full turn. - I can identify and name perpendicular and parallel lines - I can find vertical and horizontal lines - I can draw and describe 2d shapes - I can make and describe 3d shapes. - I can measure the total length around a shape

• I can solve multiplication word problems • I can solve division word problems. • I can estimate the answer to a calculation • I can use inverse to check answers	• I can find the starting time, end time and duration • I can tell the time on a 12h and 24 hour clock. • I can read Roman numerals from I to XII • I can change minutes to seconds and vice versa • I know the number of days in each month, year and leap year • I can find the number of days using a calendar.	• I can find the perimeter of figures using a square grid • I can find the perimeter of figures in cm and m • I can find the perimeter of squares and rectangles.

Year 4 Overview

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer
The Forgotten Flamboyant King James I (1567 – 1625)	Gift of Giving	War, Fire & Pestilence Charles I-II (1625-49 & 1649-51)	Around the world in 80 days	Lights, Camera, Fashion
• I can count to 10000 • I can count in thousands, hundreds, tens and ones. • I can find 1000 more or 1000 less than a given number • I can count in 25s • I can count in 6s, 7s and 9s • I can tell the number that a digit stands for • I can compare and arrange numbers within 10000 • I can describe and complete number patterns • I can count backwards to include negative numbers • I can round any number to 10, 100 and 1000 • I can estimate sum and difference.		• I can use a table to show information • I can draw, read and interpret tables • I can draw, read and interpret bar graphs • I can draw, read and interpret picture graphs • I can draw, read and interpret line graphs • I can draw, read and interpret time graphs • I can solve problems using info from tables and graphs • I can count in hundredths • I can write and show mixed numbers on a number line • I can find equivalent fractions and show visually • I can simplify fractions and mixed numbers • I can add and subtract fractions • I can solve word problems involving fractions.		• I can count an amount of money and write using decimals • I can round money to the nearest £ and nearest £10 • I can estimate total amounts of money • I can solve problems involving money • I can measure and estimate mass • I can measure and estimate volume • I can measure and estimate length • I can convert units of mass • I can convert units of volume • I can convert units of length • I can measure perimeter in different units. • I can find the area using square tiles • I can find the area in a square grid • I can find the area of squares and rectangles by multiplying. • I can identify acute and obtuse angles

• I can add numbers up to 4 digits using an appropriate method • I can add numbers mentally • I can subtract numbers up to 4 digits using an appropriate method • I can subtract mentally • I can solve addition word problems • I can solve subtraction word problems. • I can estimate and use inverse to check answers • I can multiply by 6,7,9,11,12 • I can divide by 6,7,9,11,12 • I can divide to find quotient and remainder • I can solve multiplication word problems • I can solve division word problems. • I can multiply and divide mentally using place value knowledge. • I can multiply without regrouping • I can multiply with regrouping • I can divide without regrouping • I can divide with regrouping. • I can multiply together three numbers • I can use factor pairs and commutatively in mental calculations • I can use the distributive law to multiply two digit numbers by one digit	• I can tell the time using the 24 hour clock • I can convert between analogue and digital time. • I can change time in minutes to seconds • I can change time in hours to minutes • I can change time in years to months and vice versa. • I can find the duration, start and finish time • I can solve time word problems. • I can recognise and write tenths • I can recognise and write hundredths • I can count up and down in hundredths. • I can compare numbers with the same number of decimal places • I can complete number patterns involving decimals • I can round decimals with 1dp to the nearest whole number • I can recognise and write decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$ and 3/4 • I can divide a 1 or 2 digit number by 10 • I can divide a 1 or 2 digit number by 100 • I can solve simple measure and money problems involving decimals and fractions.	• I can compare and order angles • I can compare and classify triangles • I can compare and classify quadrilaterals • I can identify lines of symmetry in 2d shapes. • I can complete a simple symmetrical figure with respect to a specific line of symmetry. • I can describe positions using coordinates in the first quadrant • I can plot points and complete a given polygon • I can describe movement between positions as translations (up, down, left, right) • I can read and write Roman numerals 1 to 20 • I can read and write Roman numerals to 100. • I can understand how the numerical system has changed over time. • I can identify and recognise 3d shapes. • I know my times tables up to 12 x 12 by heart

Year 5 Overview

Autumn 1 Sails, Seas and Scurvy Queen Elizabeth I (1558-1603)	Autumn 2 Wonders of the World	Spring Ecotricity	Summer 1 What's on the Menu?	Summer 2 The Empire Strikes Back (27BC-476AD)
• I can read, write, order and compare numbers up to 1,000,000 • I can tell the place value of a digit		• Identify, name and write equivalent fractions of a given fractions, represented visually, including tenths and hundredths.	• I can convert between measures of length • I can convert between measures of mass • I can convert between measures of time	

- I can count forwards or backwards in steps of powers of 10 up to 1,000,000
- I can round numbers to the nearest 10, 100, 1000, 10,000 and 100,000
- I can add and subtract whole numbers with more than 4 digits
- I can add and subtract large numbers mentally
- I can use rounding to determine levels of accuracy
- I can identify multiples and factors (including factor pairs and common factors)
- I can use the vocabulary of prime numbers, prime factors and composite numbers
- I can find prime numbers up to 100 and recall prime numbers up to 19.
- Recognise and use square numbers and cube numbers, and use the notation for squared and cubed
- I can use column multiplication up to 4 digit numbers.
- I can use long division to solve a variety of problems
- Multiply and divide numbers mentally drawing upon known facts
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Divide numbers up to 4 digits by a one-digit number using the formal written method inc remainders
- I can solve addition and subtraction multi-step problems
- I can decide which operations to use in a problem and why.
- Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

- Recognise mixed numbers and improper fractions and convert from one form to the other.
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Compare and order fractions whose denominators are all multiples of the same number
- Read, write and compare numbers with up to three decimal places.
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- Round decimals with two decimal places to the nearest whole number and to one decimal place.
- Solve problems involving number up to three decimal places
- Read and write decimal numbers as fractions.
- Recognise the per cent symbol and understand the per cent relates to 'number of parts per 100'
- Write percentages as a fraction with denominator 100, and as a decimal.
- Find percentage of a number
- Solve problems with % and decimal equivalents of 1/2, ¼, 1/5, 2/5, 4/5
- Identify types of angles (acute, obtuse, right and reflex)
- Draw and measure angles

- Tell the temperature (including negative numbers)
- Use all four operations to solve problems involving measure using decimal notation, including scaling
- Measure and calculate perimeter of composite rectilinear shapes in cm and m.
- Calculate and compare the area of rectangles and estimate the area of irregular shapes.
- I can estimate volume
- Find and compare the volume
- Find and compare the capacity
- Convert volume
- Solve word problems involving volume
- I can read Roman Numerals to 1000
- I can write years in Roman Numerals

• Complete, read and interpret information in tables, including timetables. • I can solve comparison, sum and difference problems from a line graph	• Identify angles in a straight line and at a point • Find unknown angles in squares and rectangles • Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles • Write the coordinates of points • I can explain the position of a shape following a reflection and know it has not changed. • I can explain the position of a shape following a translation and know it has not changed.	

Year 6 Overview

Autumn 1 Law & Disorder (Vikings 760-1066)	Autumn 2 The Apprentice	Spring Globalcitizen@work	Summer 1 Pharaohs, pyramids & pre-historic Periods	Summer 2 Wacky Races
• I can read and write numbers up to 10 million • I can compare and arrange numbers within 10 million • I can tell the place value of a digit in a number (including decimals) • I can round numbers to the nearest 10,100,1000,10000,100000 and million • I can multiply a 4 digit by a 2 digit number • I can divide a 4 digit number by a 2 digit • I can interpret remainders in divisions and round to a specified degree of accuracy • I can use estimation to check answers • I can use the orders of operations		• I can compare quantities and numbers using ratio • I can solve problems involving the scale factor of shapes. • I can solve a range of real life problems involving ratios • I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. • I can find pairs of numbers that satisfy an equation with two unknowns. • I can enumerate possibilities of combinations of two variables	• Recap objectives- SATS revision • Budgeting/Project based work.	

- I can carry out calculations involving the four operations.
- I can identify common factors and multiples
- I can identify prime numbers
- I can solve word problems involving all operations.
- I can find equivalent fractions using common multiples
- I can simplify fractions using common factors
- I can compare and order fractions (including greater than 1)
- I can add and subtract fractions with different denominators
- I can add and subtract mixed numbers
- I can multiply proper fractions and write in the simplest form.
- I can divide proper fractions by whole numbers.
- I can relate division to fractions and decimals
- I can write fractions as decimals
- I can multiply decimals with 1 and 2 digit whole numbers
- I can divide decimals with 1 and 2 digit whole numbers
- I can convert measures of length
- I can convert measures of mass
- I can convert measures of volume
- I can convert measures of time.
- I can convert between miles and kilometres
- I can solve worded problems involving measures.
- I can calculate the percentage of a number and a quantity
- I can use percentage to describe changes
- I can use percentage to compare

- I can describe and complete a pattern/sequence
- I can write and evaluate algebraic expressions (including missing number problems)
- I can write and use formulae
- I can solve equations (including balancing equations)
- I can find the perimeter of shapes
- I can recognise that shapes with the same area can have different perimeters and vice versa.
- I can find the area of rectangles, triangles and parallelograms
- I can use formulae to find the area of rectangles, triangles and parallelograms
- I can use the area of rectangles to find the area of other types of polygons.
- I can find the volume of solids by counting the cubes
- I can calculate the volume of cubes and cuboids in standard units
- I can solve problems involving volume.
- I can recognise angles that meet at a point, on a straight line and vertically opposite.
- I can find unknown angles in triangles, quadrilaterals and regular polygons.
- I can identify the radius, diameter, circumference and centre of a circle.
- I can draw 2d shapes using given dimensions and angles
- I can identify and draw nets of 3d shapes.
- I can describe coordinates within the four quadrants
- I can draw, translate and reflect simple shapes in the coordinate plane.
- I can calculate and interpret the mean as an average

	• I can draw and interpret pie charts • I can draw and read graphs • I can solve problems using information provided by graphs • I can add and subtract negative numbers • I can use negative numbers in context • I can solve problems involving negative numbers.	