



St Peter's Maths Curriculum Overview - Year 3

(Some blocks may continue into start of the next term if all small steps have not been covered.)

(Non-number blocks may also be taught out of sequence by teachers covering part-time class teachers.)

Autumn term	Number Place value (3 weeks)	Number Addition and subtraction (5 weeks)	Number Multiplication and division A (4 weeks)		
	Number Multiplication and division B (3 weeks)	Measurement Length and perimeter (3 weeks)	Number Fractions A (3 weeks)	Measurement Mass and capacity (3 weeks)	
	Number Fractions B (2 weeks)	Measurement Money (2 weeks)	Measurement Time (3 weeks)	Geometry Shape (2 weeks)	Statistics Statistics (2 weeks)
Summer term					Consolidation

Year 3 Maths Small Steps Curriculum Overview – Autumn Term

Number: Place Value (Numbers up to 1,000)	Number: Addition and Subtraction	Number: Multiplication and Division
◆ Represent numbers to 100 using a range of concrete materials. ◆ Partition numbers to 100 and understand the value of each digit in a two-digit number. ◆ Count forwards and backwards in 100s. Know 10 tens = 100. ◆ Represent numbers up to 1,000 in a variety of ways e.g. using Base 10/place value counters and understand that a 3-digit number is made up of 100s, 10s and 1s. ◆ Partition numbers to 1,000. ◆ Flexibly partition numbers to 1,000. ◆ Understand relationship between one, ten and a hundred e.g. One hundred 1s=100, Ten 10s=100. ◆ Find 1, 10, Or 100 more or less than a number within 1,000. ◆ Identify numbers to 1,000 on a number line. ◆ Estimate numbers to 1,000 on a number line. ◆ Compare numbers to 1,000 using comparative language and inequality symbols. ◆ Order numbers to 1,000 and understand vocabulary ascending and descending. ◆ Use knowledge of patterns in the 5 times table to count forwards and backwards in 50s	◆ Apply knowledge of number bonds to 10 to number bonds to 100. ◆ Mentally add and subtract 1s to/from a 3-digit number. (Not crossing a ten.) ◆ Mentally add and subtract multiples of 10 to/from a 3-digit number. (Not crossing a 100) ◆ Mentally add and subtract multiples of 100 to/from a 3-digit number. ◆ Mentally add and subtract 1s, 10s and 100s to/from a 3 digit number. ◆ Mentally add 1s to a 3 digit number. (Across a 10.) ◆ Mentally add 10s to a 3-digit number. (Across a 100) ◆ Mentally subtract 1s from a 3 digit number. (Across a 10.) ◆ Mentally subtract 10s from a 3-digit number. (Across a 100.) ◆ Mentally add and subtract 1, 10s and 100s to/from any 3-digit number. ◆ Add two numbers, either both 2-digit or both 3-digit, using the formal written method (FWM). (No exchange.) ◆ Subtract two numbers, either both 2-digit or both 3-digit, using FWM. (No exchange.) ◆ Add two numbers, either both 2-digit or both 3-digit, using FWM. (Across a ten.) ◆ Add two numbers, either both 2-digit or both 3-digit, using FWM. (Across a 100.) ◆ Subtract two numbers, either both 2-digit or both 3-digit, using FWM. (Across a ten.) ◆ Subtract two numbers, either both 2-digit or both 3-digit, using FWM. (Across a 100.) ◆ Add 2 and 3-digit numbers using the formal written method. ◆ Subtract a 2-digit number from a 3 digit number, using the formal written method. ◆ Mentally calculate complements to 100. e.g. $24 + 76 = 100$ ◆ Estimate answers. ◆ Explore the inverse relationship between addition and subtraction. ◆ Solve word and reasoning addition and subtraction problems.	◆ Relate multiplication to 'equal' groups – focus on groups of 2, 5 and 10. ◆ Use arrays to enhance the link between repeated addition and multiplication and explore commutativity. ◆ Count in 2s and relate multiples of 2 to the 2x table. ◆ Count in 5s and 10s. Explore relationship between the two and relate their multiples to the 5 and 10x tables. ◆ Consolidate division by sharing and grouping. ◆ Make the link between repeated addition and multiplication and begin to calculate multiples of 3. ◆ Explore dividing by 3 through sharing into 3 equal groups and by grouping into 3s. ◆ Use knowledge of multiplying and dividing by 3 to become more fluent in the 3 times-table. ◆ Build on knowledge of the 2x table to multiply by 4. ◆ Explore dividing by 4 through sharing into 4 equal groups and grouping into 4s. ◆ Use knowledge of multiplying and dividing by 4 to deepen understanding of the 4x table. ◆ Build on knowledge of the 4x table to multiply by 8. ◆ Explore dividing by 8 through sharing into 8 equal groups and grouping into 8s. ◆ Use knowledge of multiplying and dividing by 8 to deepen understanding of the 4 times-table. ◆ Make connections between 2, 4 and 8 times-tables.

Year 3 Maths Small Steps Curriculum Overview – Spring Term

Number: Multiplication and Division	Measurement: Length and Perimeter	Fractions A
◆ Develop understanding of multiples of 10. ◆ Use known times table facts and explore related calculations. E.g. $3 \times 4 = 12$ so $30 \times 40 = 120$. ◆ Reason about multiplication by comparing facts. ◆ Multiply a 2-digit by a 1 digit number. (No exchange) E.g. $23 \times 3 =$ Use partitioning/expanded method. ◆ Multiply a 2-digit by 1 digit number. (With exchange) E.g. $16 \times 3 =$ Use partitioning/expanded method ◆ Link multiplication and division. ◆ Divide 2-digits by 1 digit (No exchange) e.g. $84 \div 4 =$ Use partitioning method – see Calculation Policy. ◆ Divide 2-digits by 1 digit (With exchange) E.g. $96 \div 4 =$ Use flexible partitioning method—see Calculation Policy. ◆ Divide 2-digits by 1 digit with a remainder. ◆ Introduce the concept of scaling and ‘times as many’. E.g. 3 times as many boys as girls. ◆ Work systematically to find ‘How many ways’ from 2 groups of objects. E.g. If you have 4 coloured buckets and 3 coloured spades, how many different ways could they be matched?	◆ Measure lengths in metres and centimetres. E.g. 1m and 20cm ◆ Measure lengths in millimetres and understand that 1cm = 10mm. ◆ Measure lengths in cm and mm. E.g. 4cm and 3mm. ◆ Relate metres, centimetres and millimetres. Understand 100cm = 1m and compare and consider which unit would be suitable to measure objects of varying lengths. ◆ Recognise that 100cm = 1m and convert lengths from cm to m and vice versa. E.g. 500cm = 5m, 325cm = 3m and 25cm. (Decimal notation is not used until Year 4.) ◆ Recognise that 10mm = 1cm and convert lengths from mm to cm and vice versa. E.g. 50mm = 5cm, 35mm = 3cm and 5mm ◆ Compare and order lengths through converting all measurements to the same unit of length. ◆ Add lengths through converting measurements to the same unit of length. ◆ Subtract lengths through converting measurements to the same unit of length. ◆ Understand the meaning of ‘perimeter’ and find the perimeter of shapes on squared grids. ◆ Find the perimeter of simple shapes by measuring the length of the sides. ◆ Calculate the perimeter of simple 2 D shapes.	◆ Explore the denominators of unit fractions. Understand that it represents how many equal parts the whole has been divided into. ◆ Compare and order unit fractions. ◆ Understand the numerators of non-unit fractions and that a non-unit fraction is made up of a quantity of unit fractions. E.g. $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$. ◆ Understand that one whole is when the numerator is the same as the denominator. ◆ Compare and order non-unit fractions with the same denominator. ◆ Relate fractions ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$) to real life contexts of scales of mass, volume and length. ◆ Explore how fractions can be represented on a number line. ◆ Count forwards and backwards in fractions on a number line. ◆ Find equivalent fractions by comparing multiple number lines. ◆ Explore how bar models can be used to find equivalent fractions.
		Measurement: Mass and Capacity ◆ Explore scales and understand how to calculate the value of intervals on the scale. ◆ Measure mass in grams. (up to 100g) ◆ Measure mass in kilograms and grams . Record as kg ‘and’ g. ◆ Explore equivalence of 1 kg = 1000g. (Formal conversion: kg and g is taught in Year 5.) ◆ Compare masses of different objects using kg and g. ◆ Add and subtract mass. ◆ Understand the terms ‘capacity and ‘volume’ and measure in millilitres. ◆ Measure capacity and volume in litres and millilitres. ◆ Build on understanding of equivalence of 1l = 1000ml ◆ Compare capacity and volume. ◆ Add and subtract capacity and volume. (mentally)

Year 3 Maths Small Steps Curriculum Overview – Summer Term

Fractions B	Measurement: Time	Shape
◆ Add 2 or more fractions with the same denominator within one whole. E.g. $\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$ or one fifth add three fifths equals four fifths. ◆ Subtract fractions with the same denominator within one whole. E.g. $\frac{5}{6} - \frac{3}{6} = \frac{2}{6}$ ◆ Use number bond knowledge to explore the different ways a whole can be partitioned. E.g. $1 = \frac{0}{5} + \frac{5}{5} = \frac{1}{5} + \frac{4}{5} = \frac{2}{5} + \frac{3}{5}$ Use this knowledge to find missing number problems E.g. $\frac{3}{7} + \underline{\hspace{1cm}} = 1$ ◆ Find a unit fraction of a number, amount or set of objects. E.g. Find $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{8}$ and $\frac{1}{10}$. (Use bar models) ◆ Relate finding fractions of amounts to dividing quantities into equal part for known division facts. E.g. $20 \div 4 = 5$ so $\frac{1}{4}$ of $20 = 5$. ◆ Find a non-unit fractions of a number, amount or set of objects. Use knowledge that the denominator is how many equal parts the whole is divided into and the numerator is how many parts of the whole there are. For example, to find $\frac{3}{4}$ of an amount means dividing the whole into 4 equal parts, then finding the total of 3 of these parts. (Use bar model) ◆ Solve problems in various contexts and reason with fractions of an amount.	◆ Introduce Roman numerals for numbers 1 to 12 and focus on the Roman numeral system e.g. 4 = IV (5-I) and 9 = IX (10-I) ◆ Recap how to write 'o'clock' and 'half past' times. ◆ Use analogue clock to tell the time to the nearest 5 minutes. Focus on language 'past' and 'to'. ◆ Use an analogue clock to tell the time to the nearest minute. ◆ Introduce telling the time on the digital clock. (Say "20 minutes to 4" to describe the time displayed on a digital clock as "3:40", not "40 minutes past 3") Use a colon, not decimal point, when recording times. ◆ Introduced to the terms "am" and "pm" to describe times before 12 noon and after 12 noon respectively. Understand that at 12 noon and 12 midnight, am and pm are not used. Recognise that 24 hours in a day are split into 12 hours before noon and 12 hours after noon ◆ Explore the number of days in a week, and days and months in a year. Introduce the concept of leap years and know how these differ from non-leap years. ◆ Explore relationship between weeks, days and hours. E.g. 1 week = 7 days and 1 day = 24 hours and use these facts to solve time problems. Discuss how there are 5 days in a school week but 7 days in an actual week. ◆ Find durations of time between given start and end times on analogue and digital clocks. (Recap how there are 60 minutes in one hour, so number bonds to 60 are needed.) ◆ Use a given duration to count forward to find an end time, or count back to find a start time on both analogue and digital clocks. (Encourage use of a number line.) ◆ Understand there are 60 seconds in 1 minute and use this fact to complete time conversions. ◆ Understand what unit of time would be suitable to measure the time it takes to complete an everyday task. E.g. seconds, minutes, hours. ◆ Solve multi step time problems.	◆ Recognise angles as a measure of a turn: a right angle = $\frac{1}{4}$ of a turn, 2 right angles = $\frac{1}{2}$ a turn, 3 right angles = $\frac{3}{4}$ turn and 4 right angles = a complete turn ◆ Introduce the term "right angle" to describe a quarter turn and learn the symbol for a right angle. Make the link that two right angles are equal to one half turn, three right angles are equal to three-quarters of a turn and four right angles are equal to a full turn. ◆ Explore angles that are greater than and smaller than a right angle. Introduce the terms 'acute' and 'obtuse' to describe the angles. ◆ Measure and draw straight lines accurately in centimetres and millimetres. (Decimal notation not used yet) ◆ Recognise and draw horizontal and vertical lines. ◆ Find and identify parallel and perpendicular lines in a range of contexts. Introduce arrow notation to represent parallel lines and use the right-angle symbol to show perpendicular lines. ◆ Recognise, describe and draw 2D shapes accurately. (Using types of angles, lines, symmetry and length of sides to describe the shapes.) ◆ Accurately create and draw 2-D shapes. ◆ Recognise and describe 3D shapes using their properties: faces, edges and vertices. ◆ Build 3-D shapes from a range of construction materials
Measurement: Money		Statistics
◆ Count, compare and solve problems with money involving pounds and pence totalling less than 100p. (Decimal notation for money is not used until Y4-) ◆ Convert an amount of pence to pounds and pence using knowledge that £1 = 100p. E.g. 165p = £1 and 65p ◆ Explore different representations (part whole model, bar model, number line) to add together two amounts of money. (Use strategy add pounds together then add pence.) ◆ Explore different representations to subtract two amounts of money. (Use number line to find the difference.) ◆ Build on knowledge of subtracting money to find change. (Use number lines to count on.)		◆ Read and interpret information presented in pictograms. Understand the value of each symbol and what it means when a half, quarter or three-quarter symbol is used. ◆ Construct pictograms using given data on a range of topics. ◆ Read and interpret bar charts with scales in steps of 1, 2, 5 and 10. ◆ Use information from tally charts, pictograms and tables to construct bar charts with scales in steps of 1, 2, 5 and 10. ◆ Carry out data collection and construct pictograms and bar charts. ◆ Interpret information from simple two-way tables to answer one and two-step problems.