

Maths Programme of Study Progression of skills

"Life in all its fullness." John 10:10

Strand: Number and Place Value

Strana: Number and Place Value							
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
• Count to and across 100,	• Count in steps of 2, 3, and 5	• Count from 0 in multiples of 4,	• Count in multiples of 6, 7, 9,	• Read, write, order and	• Read, write, order and		
forwards and backwards,	from 0, and in tens from any	8, 50 and 100; find 10 or 100	25 and 1000.	compare numbers to at least	compare numbers up to 10		
beginning with 0 or 1, or from	number, forward or backward.	more or less than a given		1 000 000 and determine the	000 000 and determine		
any given number.		number.	• Find 1000 more or less than a	value of each digit .			
	Recognise the place value of		given number.	8 8	the value of each digit.		
• Count, read and write numbers	each digit in a two-digit number	Recognise the place value of		Count forwards or			
to 100 in numerals; count in	(tens, ones).	each digit in a three-digit	• Count backwards through zero	backwards in steps of powers	 Round any whole 		
multiples of twos, fives and tens.	71 .:0	number (hundreds, tens, ones).	to include negative numbers.		number to a required		
Circum annual and identify and	• Identify, represent and	C		of 10 for any number up to 1	degree of accuracy.		
Given a number, identify one more and one less.	estimate numbers using different representations, including the	• Compare and order numbers up to 1000.	• Recognise the place value of	000 000.			
more and one tess.	number line.	ω 1000 .	each digit in a four-digit number (THTU, HTU, TU, and U).		• Use negative numbers in		
• Identify and represent numbers	Thursder tures	• Identify, represent and	(1H10, H10, 10, www.0).	Interpret negative numbers	U		
using objects & pictorial	Compare and order numbers	estimate numbers using different	Order and compare numbers	in context, count forwards	context, and calculate		
representations including the	from 0 up to 100; use <, > and =	representations.	beyond 1000.	and backwards with positive	intervals across zero.		
number line, and use the	signs.	representations.	Begona 1000.	and negative whole numbers,			
language of: equal to, more		Read and write numbers up to	• Identify, represent and	including through zero.	 Solve number and 		
than, less than (fewer), most,	• Read and write numbers to at	1000 in numerals and in words.	estimate numbers using different		practical problems that		
least.	least 100 in numerals and in		representations.	• Round any number up to 1	involve all of the above.		
	words.	Solve number problems and	1	000 000 to the nearest 10,	and of the above.		
• Read and write numbers from 1		practical problems involving	Round any number to the	100, 1000, 10 000 and 100			
to 20 in numerals and words.	Use place value and number	these ideas.	nearest 10, 100 or 1000.	000.			
	facts to solve problems.		·	000.			
			Solve number and practical	. C-l			
			problems that involve all of the	Solve number problems and			
			above and with increasingly	practical problems that			
			large positive numbers.	involve all of the above.			
			• Read Roman numerals to 100	• Read Roman numerals to			
			(I to C) and know that over time,	1000 (M) and recognise			
			the numeral system changed to	years written in Roman			
			include the concept of zero and	numerals.			
			place value.				



Maths Programme of Study Progression of skills

"Life in all its fullness." John 10:10

Strand: Calculation - addition & subtraction

Addition & subtraction - Puguis should be taught to: - read, write & interpret mathematical statements understanding - subtraction (-) & equals (-) equal	Year1	Year 2	Year 3	Year 4	Year 5	Year 6
Solve problems with addition & subtraction (read, write & interpret mathematical statements involving addition (r) is equals (r) signs subtraction (r) & equals (r	Addition & subtraction	Addition & subtraction	Addition & subtraction	Addition & subtraction	Addition & subtraction	Addition, subtraction, multiplication
mentally, including addition (+) & equals (+) signs with record offsets and pictorial representations, including those involving addition (+) a signs with record explainments, quantities and measures applying their increasing browledge offsets and pictorial representations are including those involving and without of the digits uniform where appropriate, a three-digit number and ease within 20 which in problems in contests, deciding numbers to 20, increasing the formal written methods of experiments of the contest of the cont						
using concrete objects and pictorial representations, including the increase industries and measures applying their increasing the workedge of mental and written methods. *Recall and use audition and subtraction and subtr						
representations, including those with the form of the date subtraction and institute and representations, and missing number and tens attraction and institute and representations, and missing number and tens attraction and institute and representations, and missing number and tens attraction and institute. 1 - 1 - 9. **Solve most that didition of the date is any order and subtraction and subtr						
inviviting numbers, quantities and measures appliquity their increasing honowledge of mental and written methods. Regulation and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Add and subtract numbers using the more redigit, number and easibitations, and mentally, including zero. Add and subtract numbers using concrete objects, pictorial representations, and mentally, including and two-digit number and emborated objects a pictorial representations, and mentally, including and two-digit numbers and easibitations, and mentally, including and two-digit numbers and easibitations, and mentally, including and two-digit numbers and easibitations, and mentally including and two-digit numbers and easibitations of the context objects a pictorial representations, and mentally including and two-digit numbers and easibitations of the context objects and the problems incompleted by the context objects and including and subtraction objects and including and the context objects and the context objects and the context objects are problems under context. A two-digit number and eness addition of two numbers and easibractions of two redigit numbers A two-digit number and tens A two			a three-digit number and			
**Represent and use number honders and related subtraction pacts within 20 **Recall and use addition and subtract numbers to 20; including zero: **Solve one-step problems that involve addition and subtraction, using concrete objects, pictorial representations, and missing number problems such as 7 = [] - 9. **Solve one-step problems such as 7 = [] - 9. **Solve that addition off two numbers and tens that involved addition off two numbers and subtraction of two numbers and tens that involved addition off two numbers and tens and the foreign numbers and tens that involved addition off two numbers and tens and the foreign numbers and tens are not to the context objects. Pictorial representations, and mentally including: **Solve problems, including three one-digit numbers and tens and tens and tens and tens and tens and tens are not to the context and the subtraction of two numbers and tens are not to the context and the subtraction of the context and the subtraction of the context and tens are not to the context and the subtraction of the context and tens are not to the context and the subtraction of the context and t					•	
Represent and use number bonds and related subtraction gacts within 20 Recall and use addition and subtract medigit abstraction gacts of 20 gluently, and derive and use related gacts up to 100. Add and subtract numbers of 20, including zero. Add and subtract numbers of 20, including zero. Add and subtract numbers of 20, including zero. Add and subtract numbers of experiments that involve addition and subtract numbers and this investigation and subtractions, using concrete objects & pictorial representations, and mentally, including: A two-digit number and ones are two-digit number and ones and two-digit numbers. A two-digit number and ones addition of two numbers can be done in any order and subtraction of one number from another cannot. Recognise and use the inverse relationship between addition & subtraction and use this to cheek calculations and missing number. Add and subtract numbers within up to three digits, using problems in contexts, deciding which operations and methods for use & why. Solve addition and subtract numbers within up to three digits, using problems in contexts, deciding which operations and methods to use & why. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use & why. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use & why. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use & why. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use & why. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use & why. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods of the context of a problem, levels of accuracy. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods of the context of a problem, levels of accu				subtraction where appropriate.	+ & -)	
Regula and use number bonds and related subtraction packs within 20 Add and subtract or entitled subtraction packs within 20 Add and subtract numbers to 20 pluerity, and started properties that increase and disting properties such as 7 = [] - 9. Add and subtract numbers as adding three one-digit numbers and meters and two-digit numbers and digit numbers and distinction of one number problems such as 7 = [] - 9. Recall and use addition and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and sees and two digit numbers and meters are adding three one-digit numbers - Show that addition of two numbers can be done in any order and subtraction of one number problems and subtraction of one number problems and subtraction of one number and subtraction of one number and subtraction of one numbers are relationship between addition at subtraction and use the inverse relationship between addition and subtraction and use the inverse relationship between addition and subtraction and use the inverse relationship between addition and subtraction and use the inverse relationship between addition and subtraction and use the inverse relationship between addition and subtraction and use the inverse relationship between addition and subtraction and use the inverse relationship between addition and subtraction and use the inverse relationship between addition and use addition and use related facts up to 100. Solve addition. * Add and subtract numbers using the contents, deciding which quertions and the transvers to a calculations, under the digits, using problems in contexts, deciding which quertions and the transverse t	signs					
bands and related subtraction facts within 20 places within 20 of add and subtract one-digit a two-digit numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones authraction, using concrete objects & pictorial representations, and mentally including are a two-digit number and tens two-digit numbers and ones addition of two numbers can be done in any order and subtraction of one number from another cannot. - Recognise and use the inverse excluditions and mentally including: - Recognise and use the inverse excluditions and use the inverse of a problem, which operations and methods to use a why. - Solve and two-two-step problems in contexts, deciding which operations and methods to use 8 why. - Solve addition and subtraction multit-step problems in contexts, deciding which operations and methods to use 8 why. - Solve addition and subtraction multit-step problems in contexts, deciding which operations and methods to use 8 why. - Solve addition and subtraction multit-step problems in contexts, deciding which operations and methods to use 8 why. - Solve addition and subtraction mult			hundreds			
Recall and use addition and subtract one-digit ** **Add and subtract one-digit ** **Add and subtract one-digit numbers to 20, including zero. **Add and subtract numbers using concrete chijects, pictorial representations, and mentally, including: **a two-digit number and ones a two-digit numbers **Add and subtraction, using concrete chijects, pictorial representations, and mentally, including: **a two-digit number and ones a two-digit numbers **Add and subtract numbers using concrete chijects, pictorial representations, and mentally, including: **a two-digit number and ones a two-digit numbers **Add and subtraction of one number and ones a two-digit number and tens **Two-digit number and tens **Solve problems, including missing number problems, using number p		methods.			0	
Add and subtract one-digit where to 100, including zero. **Solve me-step profilems that involve addition and subtract numbers using concrete objects, pictorial representations, and mentally, including: **a two-digit number and ones at two-digit numbers **a two-digit numbers **Solve me-step profilems that involve addition and subtract numbers using concrete objects, pictorial representations, and missing number profilems such as 7 = [] - 9. **Solve me-step profilems that involve addition and subtract numbers using concrete objects, pictorial representations, and mentally, including: **a two-digit number and ones at two-digit numbers **a diding three one-digit numbers **Solve profilems, including missing number and tens **Solve profilems, including missing number and tens **Solve addition and use the context deprofilems incontexts, deciding which operations and methods to use & why. **Solve addition and subtraction mitistep profilems in contexts, deciding which operations and methods to use & why. **Solve addition and use the context of a profilem, levels of answers and determine, in the context of a profilem, levels of answers and determine, in the context of a profilem, levels of answers and determine, in the context o				calculation.	large numbers.	
derive and use related facts up to 100. Add and subtract numbers using concrete objects, pictorial representations, and missing number problems such as $T = [] - 9$. Solve problems and methods to use 8 why. Solve addition and subtraction, using concrete objects a pictorial representations, and missing number and ones a two-digit numbers and tens **Now that addition of two numbers can be done in any order and subtraction of one number cannot. **Recognise and use the inverse relations in umber with a didition.** **Recognise and use the inverse relations in umber with the concept objects. A pictorial representations, and missing number from another cannot. **Recognise and use the inverse relationship between addition.** **Recognise and use the inverse relations and missing number. **Recognise and use the inverse relationship between addition.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the inverse relationship and missing number.** **Recognise and use the in	O .					
• Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use & why. • Perform mental calculations, including which operations and large numbers. • Identify common factors, common fully expendence on the context, deciding which operations and methods to use & why. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use & why. • Identify common factors, common full and the context objects of the context objects of the context objects of the context objects objects of the context objects of the context objects of the context objects of the context objects ob	o o					0 11 1
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and ones at two-digit numbers - a two-digit numbers - adding three one-digit numbers - adding three one-digit numbers - Show that addition of two numbers can be done in any order and subtraction of one number from another cannot. - Recognise and use the inverse relationship between addition & subtraction and use this to check calculations and missing, number - Recognise and use the inverse relationship between addition & subtraction and use this to check calculations and missing, number - Add and subtract numbers to calculations; use inverses to calculations; use inverses to calculations, including with mumber using the subtraction and use the inverse of calculations; use inverses to calculations, including missing number problems, using number problems, including which operations and leveling which operations and leaveling which operations and large numbers - Perform mental calculations, including with mixed operations and large numbers - Solve addition and subtraction multi-step problems in contexts, deciding which operations and large numbers - Solve addition and subtraction multi-step problems in contexts, deciding which operations and use the inverse of problems in contexts, and methods to use & why. - Perform mental calculations, including		derive and use related facts up to 100.	columnar + ana –			
• Solve one step problems that involve addition and subtraction, using concrete objects, pictorial representations, and mentally, including: - Solve problems, including subtraction, using concrete objects & pictorial representations, and missing number problems such as 7 = [] - 9. - Solve problems, including a two-digit number and ones in sing number problems, using number problems, using number such as 7 = [] - 9. - Solve problems, including a two-digit number and ones in sing number facts, place value & more complex + & - Solve problems, including a two-digit number and ones in sing number facts, place value & more complex + & - Solve problems in contexts, deciding which operations and methods to use & why, using number facts, place value & more complex + & - Solve addition and subtraction multi-step problems in contexts, deciding which operations and large numbers. - Show that addition of two numbers can be done in any order and subtraction of one number from another cannot. - Recognise and use the inverse relationship between addition & subtraction and use this to check calculations and missing number. - Recognise and use the inverse relationship between addition & subtraction and use this to check calculations and missing number.	including zero.	- 0-1-1	- Fatiments amount to			
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subtraction, using concrete objects & pictorial representations, and missing, number problems such as 7 = [] - 9. **Solve problems, including missing number problems, using number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems, including missing number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve problems in contexts, using number facts, place value & more complex + & **Solve addition and subtraction nulti-step problems in contexts, number facts, place value & more complex + & **Solve addition and whith operations and deciding which operations number factors, components numbers **Solve addition and whith operations and deciding which operations number factors, components numbers **Solve addition and whith operation			•		• Colum addition and	
objects & pictorial representations, and missing number problems such as 7 = [] - 9. Solve problems, including, missing number problems, using number problems, using number problems and methods to use & why. **To two digit number and tens** **Adding three one-digit numbers** **Show that addition of two numbers can be done in any order and subtraction of one number from another cannot. **Recognise and use the inverse relationship between additions and methods to the context of a problems, including, missing number and tens* **Solve problems, including, missing number problems, including, missing number problems and methods to use & why. **Solve problems, including, missing number problems and methods to use & why. **Adding three one-digit numbers* **Show that addition of two numbers can be done in any order and subtraction and subtraction of one number from another cannot. **Recognise and use the inverse relationship between addition & subtraction and missing number* **Recognise and use this to check calculations and missing number* **Solve problems, including, missing number problems in contexts, deciding which operations and large numbers. **Use their knowledge of the order of operations to curry out calculations involving the four operations on numbers. **Solve problems in contexts, deciding which operations and large numbers. **Use their knowledge of the order of operations to contexts, deciding which operations and large numbers. **Solve additions and subtraction multi-step problems in contexts, deciding which operations and large numbers. **Solve problems in contexts, deciding which operations and large numbers. **Solve additions, industry of problems in contexts, deciding which operations and large numbers. **Solve problems in contexts, deciding which operations and subtractions, industry operations and large numbers. **Solve additions, industry operations and methods to use & why. **Solve problems in contexts, deciding which operations and multi-step problems in contexts, deciding wh		including:	dieck			
representations, and missing number problems such as 7 = [] - 9. a two-digit number and ones using number facts, place value & more complex + & attending three one-digit numbers adding three one-digit numbers Show that addition of two numbers can be done in any order and subtraction of one number from another cannot. Recognise and use the inverse relationship between addition & subtraction and use this to check calculations and missing number attwo-digit number and ones missing number facts, place value & more complex + & Attwo-digit number and tens attwo-digit number and tens attwo-digit numbers attwo-digit number and tens att		dictioning.	• Salve problems, including			
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multiples and prime numbers • Use their knowledge of the order of operations to carry out calculations involving the four operations to carry out calculations involving the four operations of solve addition and subtraction • Show that addition of two numbers can be done in any order and subtraction of one number from another cannot. • Recognise and use the inverse relationship between addition & subtraction and use this to check answers to calculations and missing number multiples and prime numbers • Use their knowledge of the order of operations to carry out calculations. • Show that addition of two numbers involving the four operations involving addition multi-step problems in contexts, deciding which operations and methods to use and why • Solve problems involving addition, subtraction, multiplication and division • Recognise and use the inverse relationship between addition & of the calculation and determine, in the calculations and missing number	1	ő				0
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• Recognise and use the inverse relationship between addition & subtraction and use this to check answers to subtraction and use this to check calculations and missing number context of a problem, levels of						methods to use and why • Solve
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Maths Programme of Study Progression of skills

"Life in all its fullness." John 10:10

Strand: Calculation – multiplication and division						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Multiplication & division	Multiplication & division	Multiplication & division	Multiplication & division	Multiplication & division	ALGEBRA	
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations	 Recall & use multiplication & division facts for 2, 5 & 10 tables, including recognising odd and even numbers Calculate mathematical statements for multiplication and division within the multiplication tables; write them using multiplication (x), division (÷) & equals (=) signs. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. 	 Recall & use x and ÷ facts for the 3, 4 and 8 tables. Write and calculate statements for x and ÷ using tables they know, including for TU x U using mental and progressing to formal written methods. Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. 	 Recall multiplication and division facts up to 12 x 12. 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 two-digit and three-digit numbers by a one-digit number using formal written layout. 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. 	 Identify multiples & factors; find all factor pairs of a number & common factors of 2 numbers. Know & use the vocabulary of prime numbers, prime factors & composite numbers. Establish whether a number up to 100 is prime; recall primes up to 19. Multiply numbers up to 4 digits by a one or two-digit number using a formal method, including long multiplication for two-digit numbers. multiply and divide numbers mentally drawing upon known facts. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division; interpret remainders appropriately for the context Multiply and divide whole numbers and those involving decimals by 10, 100 & 1000. Recognise and use square numbers & cube numbers and notation for squared 2, cubed 3 Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • Solve problems involving + - x ÷ and a combination of these, including understanding meaning of = sign Solve problems involving x and ÷ including scaling by simple fractions & problems involving simple rates. 	Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy number sentences involving two unknowns Enumerate possibilities of combinations of two variables. RATIO AND PROPORTION Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.	



Maths Programme of Study Progression of skills

"Life in all its fullness." John 10:10 Strand: Calculation – fractions, decimals and percentages							
Year 1	Year 2	ricus and percentages Year 3	Year 4	Year 5	Year 6		
Fractions	Fractions	Fractions	Fractions	Fractions	Fractions		
 Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity, 	• Recognise, find, name and write fractions ${}^{1}/_{3}$, ${}^{1}/_{4}$, ${}^{2}/_{4}$ & ${}^{3}/_{4}$ of a length, shape, set of objects or quantity. • Write simple fractions e.g. ${}^{1}/_{2}$ of 6 = 3 and recognise the equivalence of ${}^{2}/_{4}$ and ${}^{1}/_{2}$	 Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. Recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators. Recognise and use fractions as numbers: unit fractions & non-unit fractions with small denominators. Recognise and show, using diagrams, equivalent fractions with small denominators. Add and subtract fractions with the same denominator within one whole [e.g. ⁵/₇ + ¹/₇ = ⁶/₇] Compare and order unit fractions, and fractions with the same denominators. Solve problems that involve all of the above. 	 Recognise and show using diagrams, families of common equivalent fractions Count up and down in hundredths; recognise that hundredths arise when dividing an object by a 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. Add and subtract fractions with the same denominator Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise & write decimal equivalents to ¹/₄; ¹/₂; ³/₄ Find the effect of dividing a one or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths Round decimals with one decimal place to the nearest whole number Compare numbers with the same number of decimal places up to two decimal places Solve simple measure and money problems involving fractions and 	 Compare & order fractions whose denominators are all multiples of the same number Identify, name & write equivalent fractions of a given fraction, represented visually, inc. ¹/₁₀ & ¹/₁₀₀ Recognise mixed numbers & improper fractions; convert from one form to the other; write mathematical statements > 1 as a mixed number [e.g. ²/₅ + ⁴/₅ = ⁶/₅ = 1 ^{1/5}₅] Add & subtract fractions with the same denominator & multiples of the same number. Multiply proper fractions & mixed numbers by whole numbers, supported by materials & diagrams. Read and write decimal numbers as fractions [e.g. 0.71 = ⁷¹/₁₀₀] Recognise and use ¹/₁₀₀₀ and relate them to ¹/₁₀, ¹/₁₀₀ & decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places Solve problems with number to three decimal places. Recognise the per cent symbol (%) and understand that per cent relates to 'the number of parts per 100' and write percentages as a fraction with denominator hundred; and as a decimal fraction. 	 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. Compare & order including fractions >1 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in it simplest form [for example ¹/4 x ¹/6 = ¹/8] Divide proper fractions by whoth numbers [for example ¹/3 ÷ 2 = ¹/6] Associate a fraction with division and calculate decimal fraction equivalents [for example 0.375] for a simple fraction [for example ³/8] Identify the value of each digit to three decimal places & x and ÷ numbers by 10, 100 and 1000 - with answers to 3 decimal places. Multiply one-digit numbers with up to two decimal places by who numbers Use written ÷ methods where the answer has up to 2 decimal place. Solve problems which require 		

decimals to two decimal places.

hundred; and as a decimal fraction

of a multiple of 10 or 25.

Solve problems which require knowing

percentage and decimal equivalents of $^{1}/_{2}$,

 $^{1}/_{4}$, $^{1}/_{5}$, $^{2}/_{5}$, $^{4}/_{5}$ and those with a denominator

• Recall & use equivalences

& percentages, including in different contexts.

degrees of accuracy

answers to be rounded to specified

between simple fractions, decimals



Maths Programme of Study Progression of skills

"Life in all its fullness." John 10:10

Strand: Measures

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Compare, describe and solve	Choose and use appropriate standard	Measure, compare, add and	• Convert between	Convert between different units	Solve problems involving the
practical problems for:	units to estimate and measure:	subtract: lengths (m/cm/mm);	different units of	of metric measure [e.g.	calculation and conversion of units
		mass (kg/g); volume/capacity	measure (e.g. kilometre	kilometre and metre; centimetre	of measure, using decimal notation
- lengths and heights [e.g.	- length/height in any	(l/ml)	to metre; hour to	and metre; centimetre and	up to three decimal places where
long/short, longer/shorter,	direction (m/cm);		minute)	millimetre; gram and kilogram;	appropriate
tall/short, double/half]	- mass (kg/g);	 Measure the perimeter of 		litre and milliliter]	
	- temperature (°C);	simple 2-D shapes	Measure and calculate		 Use, read, write and convert
- mass or weight [e.g. heavy/light,	- capacity (litres/ml) to the		the perimeter of a	Understand and use	between standard units, converting
heavier than, lighter than]	nearest appropriate unit	Add and subtract amounts of	rectilinear figure	approximate equivalences	measurements of length, mass,
	using rulers, scales,	money to give change, using	(including squares) in	between metric units and	volume and time from a smaller
- capacity/volume [full/ empty,	thermometers and	both £ and p in practical	centimetres and metres.	common imperial units such as	unit of measure to a larger unit,
more than, less than, half, half full,	measuring vessels	contexts		inches, pounds and pints.	and vice versa, using decimal
quarter]			 Find the area of 		notation to up to three decimal
	Compare and order lengths, mass,	Tell and write the time from	rectilinear shapes by	 Measure and calculate the 	places
- time [e.g. quicker, slower, earlier,	volume / capacity and record the results	an analogue clock, including	counting squares.	perimeter of composite rectilinear	
later]	using >, < and =	using Roman numerals from I		shapes in centimetres and	Convert between miles and
		to XII, and 12-hour and 24-	Estimate, compare	metres.	kilometres
Measure and begin to record the	Recognise and use symbols for pounds	hour clocks	and calculate different		
following: lengths and heights;	(£) and pence (p); combine amounts to		measures, including	Calculate and compare the	 Recognise that shapes with the
mass/weight; capacity & volume;	make a particular value.	Estimate and read time with	money in pounds and	area of rectangles (including	same areas can have different
time (hours, minutes, seconds)		increasing accuracy to the	pence.	squares) and including using	perimeters and vice versa.
	Find different combinations of coins	nearest minute; record and		standard units, square	
Recognise and know the value of	that equal the same amounts of money	compare time in terms of	• Read, write and	centimetres (cm²) & square	 Recognise when it is possible to
different denominations of coins and		seconds, minutes, hours and	convert time between	metres (m²) and estimate the	use formulae for area and volume of
notes.	Solve simple problems in a practical	oʻclock; use vocabulary such	analogue and digital 12	area of irregular shapes	shapes.
	context involving addition and	as a.m./p.m., morning,	and 24-hour clocks.		
Sequence events in chronological	subtraction of money of the same unit,	afternoon, noon and midnight		• Estimate volume [eg. using 1	Calculate the area of
order using language such as:	including giving change.		Solve problems	cm³ blocks to build cuboids	parallelograms and triangles.
before and after, next, first, today,		Know the number of seconds	involving converting	including cubes] and capacity	
yesterday, tomorrow, morning,	Compare and sequence intervals of	in a minute and the number of	from hours to minutes;	[e.g. using water]	Calculate, estimate and compare
afternoon and evening.	time.	days in each month, year and	minutes to seconds;	[e.g. usung water]	volume of cubes and cuboids using
		leap year	years to months; weeks	Solve problems involving	standard units, including centimetre
Recognise and use language	• Tell and write the time to five minutes,		to days.	converting between units of time.	cubed (cm³) and cubic metres (m³),
relating to dates, including days of	including quarter past/to the hour and	• Compare durations of events,		Conversing between and of time.	and extending to other units [for
the week, weeks, months and years.	draw the hands on a clock face to show	[for example to calculate the		Use all four operations to solve	example mm ³ and km ³ .]
	these times.	time taken by particular events		problems involving measure [for	
Tell the time to the hour and half	Know the number of minutes in an	or tasks.]		example length, mass, volume,	
past the hour and draw the hands	hour and the number of hours in a day.			money] using decimal notation	
on a clock face to show these times.				including scaling.	
			l	u ununing suming.	



Maths Programme of Study Progression of skills

"Life in all its fullness." John 10:10

Strand: Geometry							
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
Geometry: Properties of shapes	Geometry: Properties of shapes	Geometry: Properties of shapes	Geometry: Properties of shapes	Geometry: Properties of shapes	Geometry: Properties of shapes		
• Recognise and name common 2-D and 3-D shapes, including:	• Identify & describe the properties of 2-D shapes, including the number of sides & line symmetry in a vertical line	Draw 2-D shapes and make 3-D shapes using modelling materials;	Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	• Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.	Draw 2-D shapes using given dimensions and anglesRecognise, describe and build simple		
2-D shapes (e.g. rectangles (including squares), circles and triangles)	Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	recognise 3-D shapes in different orientations and describe them.	Identify acute and obtuse angles and compare and order angles up to two right angles by size	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure	3-D shapes, including making nets. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any		
3-D shapes (e.g. cuboids (including cubes), pyramids and spheres).	• Identify 2-D shapes on the surface of 3-D shapes, [e.g. a circle on a cylinder & a triangle on a pyramid.]	Recognise that angles are a property of shape or a description of a turn	Identify lines of symmetry in 2-D shapes presented in different orientations	them in degrees (°) • Identify: angles at a point and one whole turn (total 360°); angles at a	triangles, quadrilaterals, and regular polygons. • Illustrate and name parts of circles,		
Position and direction • Describe position,	Compare and sort common 2-D and 3-D shapes and everyday objects.	Identify right angles, recognise that two right angles make a half-turn, three make three	Complete a simple symmetric figure with respect to a specific line of symmetry.	point on a straight line and $\frac{1}{2}$ a turn (total 180°); other multiples of 90°	including radius, diameter and circumference and know that the diameter is twice the radius.		
directions and movements, including half, quarter and three- quarter turns.	Order and arrange combinations of mathematical objects in patterns and sequences.	quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle	Position and direction Describe positions on a 2-D grid as coordinates in the first quadrant	 Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and 	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.		
	Use mathematical vocabulary to	Identify horizontal and	Describe movements between	irregular polygons based on reasoning about equal sides and angles.	Position and direction		
	describe position, direction and movement including movement in a straight line, distinguishing between	vertical lines and pairs of perpendicular and parallel lines.	positions as translations of a given unit to the left/right and up/down	Position and direction	Describe positions on the full coordinate grid (all four quadrants)		
	rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)	per caree in tee.	Plot specified points and draw sides to complete a given polygon.	Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.		

the shape has not changed.



Maths Programme of Study Progression of skills

"Life in all its fullness." John 10:10

Strana:	Statistics	

Year1	Year 2	Year 3	Year 4	Year 5	Year 6
Year 1	Pupils should be taught to: • 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 the categories by quantity	Year 3 Pupils should be taught to: Interpret and present data using bar charts, pictograms and tables Solve one and two step questions [For example: "How many more?" and "How many fewer?"]	Pupils should be taught to: 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,	Year 5 Pupils should be taught to: • Solve comparison, sum and difference problems using information presented in a line graph • Complete, read and interpret information in tables, including timetables.	Year 6 Pupils should be taught to: • Interpret and construct pie charts and line graphs and use these to solve problems • Calculate and interpret the mean as an average.
	Ask and answer questions about totaling and comparing categorical data.	using information presented in scaled bar charts and pictograms and tables.	pictograms, tables and other graphs.		