Year 5 – Content for Learning

Maths, Economics and Enterprise

ss – spine segment

Addition and Subtraction: Multiples of 1,000 up to 1,000,000 (ss: 1.26) Negative numbers: counting, comparing, calculating (ss: 1.27) Common structures and the part-part-whole relationship (ss: 1.28) Using equivalence and the compensation property to calculate (ss: 1.29) **Place Value** – writing numbers in words**,** using Roman Numerals to 1000 and for years

Multiplication and Division: Using equivalence to calculate (ss: 2.18) Multiplying and dividing decimal fractions by whole numbers (ss: 2.19) Multiplication with three factors and volume (ss: 2.20) Factors, multiples, prime numbers and composite numbers (ss: 2.21) Combining multiplication with addition and subtraction (ss: 2.22) Use formal algorithms to multiply 4 digit nos by 1 and 2 digits

Fractions: Finding equivalent fractions and simplifying fractions (ss: 3.7) Common denomination: more adding and subtracting (ss: 3.8) Converting fractions into decimals and decimals into fractions**,** Thousandths are the third decimal place

Measurement: Length – understanding proportion and solving m/km problems Mass – understanding proportion and reading different scales, **Capacity** – understanding proportion & equivalency of containers, **Temperature** – using thermometers and ordering temperatures, **Money –** exchanging coins/notes, addition & subtraction of **Time –** Tell time to 1 minute, convert different units of time including days / weeks, timetables, Roman Numeral clocks

Geometry: Angles – naming and creating, Using a protractor, Sum of angles on a straight line, Sum of angles around a point

Statistics: Line graphs, Two way Tables, Timetables

Communication, Languages and Literacy

Children should have the opportunity to write at least one piece from each of the purposes below

- **Writing to Entertain:**
  Narrative writing including description (character/setting), poetry
- **Writing to Inform:**
  Report, recount, letter, biography, explanation
- **Writing to Persuade:**
  Letter, advert, speech, campaign
- **Writing to discuss:**
  Argument, article, review
- **Reading**
  Content domains (2a, b, c, d, e, f, g, h)
  Word reading including decoding (Phonics - Letters and Sounds)
  Comprehension: retrieval, deduction, inference, prediction, summarising, exploring authorial intent
- **Vocabulary, Grammar, Punctuation, Spelling**
- **Handwriting**
- **Phonics:** following Letters & Sounds
- **Spoken Language:** Speaking, listening & responding, group discussion & drama
- **MFL**

Creative and Expressive Arts

- Drawing and sculpture
- Painting
- Printing and design
- Responding to art
- Identify musical style indicators for a range of styles.
- Discuss families of instruments.
- Improvise and perform in solo and ensemble contexts using tuned/un-tuned instruments for a clear purpose.
- Recognise and use staff notation to read and play rhythms and melodies.
- Perform as part of an ensemble.

- ***Drama found within Spoken Language Curriculum***
- ***Dance found within PE Curriculum***

Historical, Global, Social and Spiritual Understanding

- Identify the position and significance of latitude, longitude, Equator and both hemispheres.
- Contrast a South American country with the UK. Understanding how communities are diverse, how they are changing and how they are interconnected.
- Develop fieldwork skills, gathering and presenting the data through charts/diagrams.
- RE – Pilgrimages in Hinduism and Islam.
- Christian and Sikh lifestyles and community.
- Ancient Greece – study way of life, using artefacts; democracy; compare the chronology of Greek civilisation with history of Britain.
- The Mayans – compare civilisation with that of Greeks, Romans and Egyptians; influence society today.
- Methods of historical enquiry.

Physical wellbeing, health and lifestyles

- Fitness and health – importance, how to improve
- Games – rules and skills – tag rugby, hockey, basketball, cricket, tennis, football, volleyball
- Gymnastics – complex actions, control, coordination, balances, sequences
- Athletics – pace, targets, speed, technique
- Dance
- Families and people who care for me
- Caring relationships
- Respecting ourselves and others
- Online Relationships and internet safety/harms
- Being Safe
- Physical and mental wellbeing
- Growing and changing

Scientific and Technological Understandings

- Life cycles: plant/animal reproduction; aging process in humans
- Properties and changes of materials- compare/group materials, uses; solids, liquids and gases and changes of state, dissolving and solutions, separating mixtures, burning and acids, reversible/irreversible changes
- Earth and space - planets, sun, moon, Earth, day and night
- Forces – gravity, friction, air and water resistance; mechanisms, including levers, pulleys, gears, and impact on force
- Scientific discoveries and a range of scientists
- Referencing and effective, reliable use of internet searches
- Create tables and databases to analyse data
- Choose medium for sharing, playing and collaborating online; E-safety, cyber bullying and digital footprint.
- Using advanced tools in word/presentation
- Programming: expand understanding of iteration and selection
- Structures – Kites
- Textiles – slippers
- Mechanical control – Cams (moving toys)
- Cooking and nutrition – main course

YEAR 5 MATHS

Subject content	Teaching Points	Inspire link, NCETM steps in learning, and additional resources	National Curriculum Vocabulary	National Curriculum Statutory requirements by the end of Year 5
Number, Addition & Subtraction	**1.26 Multiples of 1,000 up to 1,000,000** • **Teaching Point 1**: Understanding of numbers composed of hundred thousands, ten thousands and one thousands can be supported by making links to numbers composed of hundreds, tens and ones. • **Teaching Point 2**: Multiples of 1,000 up to 1,000,000 can be placed in the linear number system by drawing on knowledge of the place of numbers up to 1,000 in the linear number system. • **Teaching Point 3**: Numbers can be ordered and compared using knowledge of their composition and their place in the linear number system. • **Teaching Point 4**: Calculation approaches for numbers up to 1,000 can be applied to multiples of 1,000 up to 1,000,000. • **Teaching Point 5**: Numbers can be rounded to simplify calculations or to indicate approximate sizes. • **Teaching Point 6**: Known patterns can be used to divide 10,000 and 100,000 into two, four and five equal parts. These units are commonly used in graphing and measures.	**NCETM 1.26 Multiples of 1,000 up to 1,000,000** NCETM Steps in learning. 1:1 – 1:12 NCETM Steps in learning. 2:1 – 2:6 (refer to 1.22 composition of four-digit numbers) NCETM Steps in learning. 3:1 - 3:3 (refer to 1.9 composition of numbers 20-100, and1.18 composition of three-digit numbers) NCETM Steps in learning. 4:1 - 4:8 (refer to 1.18 composition of three-digit numbers, and 1.19 securing mental strategies) NCETM Steps in learning. 5:1 - 5:8 (refer to 1.22 composition of four-digit numbers) NCETM Steps in learning. 6:1 - 6:4 (refer to 1.17 and 1.22)	Digit Numerals Sequence Ascending/descending Approximately **Additional resources** PV counters PV chart Comparing with cubes	**Place Value:** To read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit. To understand number in context, including measurement. To count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. To round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 To solve number problems and practical problems that involve all of the above.
	1.27 Negative numbers: counting, comparing, calculating • **Teaching Point 1**: Positive and negative numbers can be used to represent change. • **Teaching Point 2**: Our number system includes numbers that are less than zero; these are negative numbers. Numbers greater than zero are positive numbers. • **Teaching Point 3**: Consecutive whole numbers have a difference of one; consecutive odd/even numbers have a difference of two. • **Teaching Point 4**: Negative numbers can be shown on horizontal scales; numbers to the left of zero are negative and numbers to the right of zero are positive. The larger the value of the numeral after the negative/minus symbol, the further the number is from zero. • **Teaching Point 5:** Knowledge of the positions of positive and negative numbers in the number system can be used to calculate intervals across zero.	**NCETM 1.27 Negative numbers: counting, comparing, calculating** NCETM Steps in learning. 1:1 – 1:4 NCETM Steps in learning. 2:1 – 2:3 NCETM Steps in learning. 3:1 – 3:5 NCETM Steps in learning. 4:1 – 4:8 NCETM Steps in learning. 5:1 – 5:3 NCETM Steps in learning. 6:1 – 6:4	Difference Negative Celsius Coordinates Quadrant x-axis, y-axis Translate	To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.

	• **Teaching Point 6:** Negative numbers are used in coordinate and graphing context.			
	1.28 Common structures and the part-part-whole relationship • **Teaching Point 1**: Mathematical relationships encountered at primary level are either additive or multiplicative, both of these can be observed within the structures of part-part-whole relationships. • **Teaching Point 2**: Problems in many different contexts can be solved by adding together the parts to find a whole. Different strategies can be used to calculate the whole, but the structure of the problem remains the same. • **Teaching Point 3**: If the value of the whole is known, along with the values of all but one of the parts, the value of the missing part can be calculated. Different strategies can be used to calculate the missing part, but the structure of the problem remains the same. • **Teaching Point 4**: Problems in many different contexts have the 'missing part' structure. (Geometry, Statistics, Money)	**NCETM 1.28 Common structures and the part-part-whole relationship** NCETM Steps in learning. 1:1 – 1:7 NCETM Steps in learning. 2:1 – 2:7 NCETM Steps in learning. 3:1 – 3:7 NCETM Steps in learning. 4:1 – 4:6	Additive Multiplicative Partition addend	
	1.29 Using equivalence and the compensation property to calculate • **Teaching Point 1**: If one addend is increased and the other is decreased by the same amount, the sum stays the same. • **Teaching Point 2**: If one addend is increased (or decreased) and the other is kept the same, the sum increases (or decreases) by the same amount). • **Teaching Point 3**: If the minuend and subtrahend are changed by the same amount, the difference stays the same. • **Teaching Point 4**: If the minuend is increased (or decreased) and the subtrahend is kept the same, the difference increases (or decreases) by the same amount. • **Teaching Point 5**: If the minuend is kept the same and the subtrahend is increased (or decreased), the difference decreases (or increases by the same amount). • **Teaching Point 6**: The value of the expressions on each side of an equals symbol must be the same; addition and subtraction are inverse operations. We can use this knowledge to balance equations and solve problems.	**NCETM 1.29 Using equivalence and the compensation property to calculate** NCETM Steps in learning. 1:1 – 1:10 (refer to 1.19 securing mental strategies) NCETM Steps in learning. 2:1 – 2:9 (refer to 1.13 addition and subtraction of two-digit and one-digit numbers) NCETM Steps in learning. 3:1 – 3:14 (refer to 1.12 subtraction as difference) NCETM Steps in learning. 4:1 – 4:8 (refer to 1.13 NCETM Steps in learning. 5:1 – 5:7 NCETM Steps in learning. 6:1 – 6:8	Addend Sum Increase Decrease Minuend Subtrahend Difference Equal to inverse	**Addition and Subtraction** To add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). To add and subtract numbers mentally with increasingly large numbers. To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
Place Value	**Inspire Teaching Point 1:** Children will count on in ten thousands to one hundred thousand and in one hundred thousands to one million. **Inspire Teaching Point 2:** Read and write six and seven digit numbers in numerals and words. **Additional Teaching Point 1** : Read and recognise Roman numerals up to 1000, including recognising years	**Inspire 5A** Unit 1 p.5 - 15 **Inspire 5A** Unit 1 p.16 - 23 **Self-resourced**	Ones Tens Hundreds Digit Numerals One digit Two-digit Representation Estimation	To read Roman numerals to 1000 (M) and recognise years written in Roman numerals. To recognise linear sequences and to find term to term rules.

	Additional Teaching Point: Children should recognise and describe linear number sequences, including those involving fractions and decimals, and find the term-to-term rule. They should recognise and describe linear number sequences (for example, 3, 31/2, 4, 41/2, 5, 51/2 ...), including those involving fractions and decimals, and find the term-to-term rule in words (for example, add 1/2).	**Self-resourced** (White Rose Maths Y5 Autumn Block 1 Place Value)	Compare Greater than More than Less than Fewer than Equals	
Multiplication and Division	**2.18 Using equivalence to calculate** • **Teaching Point 1**: For multiplication, if there's a multiplicative *increase* to one factor and a corresponding *decrease* to the other factor, the product stays the same. • **Teaching Point 2**: For division, if there is a multiplicative change to the dividend and a corresponding change to the divisor, the quotient stays the same.	**NCETM 2.18 Using equivalence to calculate** NCETM Steps in learning. 1:1 – 1:9 (refer to 2.5 commutativity, and doubling and halving; 2.7 times tables for 2,4,8 and the relationship; 2.8 times tables 3,6,9 and the relationships) NCETM Steps in learning. 2:1 – 2:11 (refer to 2.13 multiplying and dividing by 10 or 100)	Multiplication Division Commutative Inverse Multiplier Multiplicand Product Dividend Divisor quotient Multiples, Factors Double Half	To multiply and divide numbers mentally drawing upon known facts. als sign to indicate equivalence, including in missing number problems (for example, 13 + 24 = 12 + 25; 33 = 5 x).
	2.19 Multiplying and dividing decimal fractions by whole numbers • **Teaching Point 1**: Decimal fractions (with a whole number of tenths or hundredths) can be multiplied by a whole number using known multiplication facts and unitising. • **Teaching Point 2**: Multiplying by 0.1 is equivalent to dividing by 10; multiplying by 0.01 is equivalent to dividing by 100. Understanding of place value can be used to divide a number by 10/100: when a number is divided by 10, the digits move one place to the right, when a number is divided by 100, the digits move two places to the right. • **Teaching Point 3**: To multiply a single-digit number by a decimal fraction with up to two decimal places, convert the decimal fraction to an integer by multiplying by 10 or 100, perform the resulting calculation using an appropriate strategy, then adjust the product by dividing by 10 or 100. • **Teaching Point 4**: If the multiplier is less than one, the product is less the multiplicand; if the multiplier is greater than one, the product is greater than the multiplicand. • **Teaching Point 5**: To divide any decimal fraction with up to two decimal places by a single-digit number, convert the decimal fraction to an integer by multiplying by 10 or 100, perform the resulting calculation using an appropriate strategy, then adjust the quotient by dividing by 10 or 100.	**NCETM 2.19 Multiplying and dividing decimal fractions by whole numbers** NCETM Steps in learning. 1:1 – 1:13 (refer to 1.23 and 1.24) NCETM Steps in learning. 2:1 – 2:5 (refer to 2.13 multiplying an dividing by 10 or 100; 2.17 using measures and comparison to understand scaling; 3.6 fractions) NCETM Steps in learning. 3:1 – 3:10 NCETM Steps in learning. 4:1 – 4:4 NCETM Steps in learning. 5:1 – 5.10	Decimal point	To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. To recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
	2.20 Multiplication with three factors and volume • **Teaching Point 1**: Volume is the amount of space that something occupies • **Teaching Point 2**: Volume is measured in cubic units, such as cubic centimetres (cm3) and cubic metres (m3). • **Teaching Point 3**: The volume of a cuboid can be calculated by multiplying the length, width and height.	**NCETM 2.20 Multiplication with three factors and volume** NCETM Steps in learning. 1:1 – 1:4 NCETM Steps in learning. 2:1 – 2:8 (refer to 2.16 area and perimeter 1)	Multiply Factor Multiplier Multiplicand Product Volume Cube	To recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). To estimate volume [for example, using 1 cm3 blocks

	• **Teaching Point 4**: Both the commutative law and associative law can be applied when multiplying three or more numbers. • **Teaching Point 5:** The choice of which order to multiply in can be made according to the simplest calculation.	NCETM Steps in learning. 3:1 – 3:11 NCETM Steps in learning. 4:1 – 4:4 NCETM Steps in learning. 5:1 - 5:4	Commutative associative	to build cuboids (including cubes)] and capacity [for example, using water] To solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. use and understand the terms factor, multiple and prime, square and cube number interpret non-integer answers to division by expressing results in different ways according to the context, including with remainders, as fractions, as decimals or by rounding (for example, 98 ÷ 4 = 4 98 = 24 r 2 = 24 2 1 = 24.5 ≈ 25)
	2.21 Factors, multiples, prime numbers and composite numbers • **Teaching Point 1**: Factors are positive integers that can be multiplied together to equal a given number. • **Teaching Point 2**: Systematic methods can be used to find all factors of a number; factors come in pairs; all positive integers have an even number of factors apart from square numbers, which have an odd number of factors; numbers with more than two factors are called composite numbers. • **Teaching Point 3**: Prime numbers are positive integers that have exactly two factors. • **Teaching Point 4**: A common factor is a factor that is shared by two or more numbers, A prime factor is a factor that is also a prime number. • **Teaching Point 5**: A multiple of a number is the product of that number and an integer; a common multiple is a multiple that is shared by two more numbers. • **Teaching Point 6**: The factor pairs of '100' can be used to support efficient calculation.	**NCETM 2.21 Factors, multiples, prime numbers and composite numbers** NCETM Steps in learning. 1:1 – 1:13 (refer to 2.9 for square numbers TP3) NCETM Steps in learning. 2:1 – 2:6 NCETM Steps in learning. 3:1 – 3:3 NCETM Steps in learning. 4:1 – 4:3 NCETM Steps in learning. 5:1 – 5:6 NCETM Steps in learning.	Factor bugs Square numbers Factors Prime numbers Composite numbers Common factor Prime factor multiple	To identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. To know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. To establish whether a number up to 100 is prime and recall prime numbers up to 19.

		6:1 – 6:3		
	2.22 Combining multiplication with addition and subtraction • **Teaching Point 1**: Multiplication can be combined with addition and subtraction; when there are no brackets, multiplication is completed before addition or subtraction;; when there are brackets, the calculation within brackets is completed first. • **Teaching Point 2**:When adding or subtracting multiplication expressions that have a common factor, the distributive law can be applied. They can construct construct equivalence statements (for example, 4 x 35 = 2 x 2 x 35; 3 x 270 = 3 x 3 x 9 x 10 = 92 x 10) Distributivity can be expressed as a(b + c) = ab + ac.	**NCETM 2.22 Combining multiplication with addition and subtraction** NCETM Steps in learning. 1:1 – 1:5 (refer to 2.10 Connecting multiplication and division, and the distributive law) NCETM Steps in learning. 2:1 – 2:5		To solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
Multiplication and Division (Additional Teaching Points)	• **Inspire Teaching Point 1:** To use a formal algorithm to multiply numbers up to 4 digits by a 1-digit number. • **Inspire Teaching Point 2:** To use a formal algorithm to multiply numbers up to 4 digits by a 2-digit number. • **Inspire Teaching Point 3:** To use a formal algorithm to divide a numbers up to 4 digits by a 1-digit whole number. • **Inspire Teaching Point 4:** Pupils interpret non-integer answers to division by expressing results in different ways according to the context, including with remainders, as fractions, as decimals or by rounding (for example, 98 ÷ 4 = 4 98 = 24 r 2 = 241/2 = 24.5 ≈ 25). • **Additional Teaching Point 1:** To use regrouping in multiplication. • **Additional Teaching Point 2:** . Pupils use and explain the equals sign to indicate equivalence, including in missing number problems (for example, 13 + 24 = 12 + 25; 33 = 5 x).	**Inspire 4A: p67-71** **Inspire 4A – p72-p78** **Inspire 4A – p79-p848** **Inspire 4A – p79-p84** **Self-resourced** **Self-resourced**		To multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. To divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
Fractions	**3.7 Finding equivalent fractions and simplifying fractions** • **Teaching Point 1:** When two fractions have different numerators and denominators to one another but share the same numerical value, they are called 'equivalent fractions'. • **Teaching Point 2:** Equivalent fractions share the same proportional (multiplicative) relationship between numerator and denominator, Equivalent fractions can be generated by maintaining that relationship through the process of multiplication and division. • **Teaching Point 3:** Fractions can be simplified by dividing both the numerator and denominator by a common factor.	**NCETM 3.7 Finding equivalent fractions and simplifying fractions** NCETM Steps in learning. 1:1 – 1:10 (refer to 3.1 preparing for fractions: the part-whole relationship, and 3.3 Non-unit fractions, identifying, representing, comparing) NCETM Steps in learning. 2:1 – 2:23 NCETM Steps in learning. 3:1 – 3:15	Equivalence Equal part Numerator Denominator Factor Common factor Multiple Simplest form	To compare and order fractions whose denominators are all multiples of the same number. To identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths To recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 5 2 + 5 4 = 5 6 = 1 5 1]

	3.8 Common denomination: more adding and subtracting • **Teaching Point 1:** In order to add related fractions, first convert one fraction so that both share the same denominator (a 'common denominator). • **Teaching Point 2:** To subtract related fractions, first convert one fraction so that both share a common denominator. • **Teaching Point 3:** The common denominator method can be extended to adding and subtracting non-unit related fractions. • **Teaching Point 4:** To add and subtract non-related fractions, the product of the two denominators provides a common denominator. • **Teaching Point 5:** Converting to common denominators is one of several methods that can be used to compare fractions.	**NCETM 3.8 Common denomination: more adding and subtracting** NCETM Steps in learning. 1:1 – 1:14 NCETM Steps in learning. 2:1 – 2:10 NCETM Steps in learning. 3:1 – 3:8 NCETM Steps in learning. 4:1-4:14 NCETM Steps in learning 5:1 – 5:15	Common denominator Related fractions	To add and subtract fractions with the same denominator and denominators that are multiples of the same number To multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
Decimals (Additional Teaching Points)	**Understanding and Interpreting Decimals** • **Inspire Teaching Point 1:** represent and interpret tenths • **Inspire Teaching Point 2:** represent and interpret hundredths • **Inspire Teaching Point 3:** represent and interpret thousandths • **Inspire Teaching Point 4:** comparing decimals (Link to measure) • **Inspire Teaching Point 5**: Round decimals with two decimal places to the nearest whole number and to the nearest tenth • **Inspire Teaching Point 6:** decimals are an extension of the representation of fractions and can be converted to fractions and vice versa	**Inspire 4B Unit 9 p6 – p11** **Inspire 4B Unit 9 p12 - p18** **Inspire 4B Unit 9 p19 – p25** **Inspire 4B Unit 9 p26 – p31** **Inspire 4B Unit 9 p32 - p37** **Inspire 4B Unit 9 p38 - p43**	Tenths, hundredths, thousandths Decimal equivalent Fraction equivalent	To read and write decimal numbers as fractions [for example, 0.71 = 71/100] 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
Percentages	• **Inspire Teaching Point 1:** Know that percent means part of 100 and that percentage is another way of comparing two numbers • **Inspire Teaching Point 2:** Express a fraction with a denominator of 10 or 100 as a percentage • **Inspire Teaching Point 3:** Express a decimal as a percentage, a percentage as a decimal and a percentage as a fraction in its simplest form • **Inspire Teaching Point 4:** Solve problems that know percentage and decimal equivalents of a half, a quarter, a fifth and multiples of 10 or 25.	**Inspire 5B Unit 10 p108 – p114** **Inspire 5B Unit 10 p115 – p120** **Inspire 5B Unit 10 p121 - p126**	Percent Percentage Numerator Denominator Decimal Equivalent Fraction Equivalent	Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal Solve problems which require knowing percentage and decimal equivalents of 2 1 , 4 1 , 5 1 , 5 2 , 5 4 and those fractions with a denominator of a multiple of 10 or 25.
Measurement	**Length - Converting Measures** • **Inspire Teaching Point 1:**To convert measurements of length, mass and volume from a larger unit to a smaller unit • **Inspire Teaching Point 2:**To convert measurements of length, mass and volume from a smallller unit to a larger unit	**Inspire Year 5B Unit 8 p53 - p57** **Inspire Year 5B Unit 8 p58 - p64** **Self-resourced**	Convert Measure Units Length Height Width	To convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre;

	• **Additional teaching point:** Solving problems about metres and kilometres up to 3 decimal places **Measure and calculate Area and Perimeter** • **Inspire Teaching Point 1:** Use formulas to measure and calculate perimeter and area of squares and rectangles • **Inspire Teaching Point 2:** Find the length or width of a square or rectangle given its area or perimeter • **Inspire Teaching Point 3:** Find the perimeter or area of composite shapes	**Inspire Year 4B Unit 12 p148-153** **Inspire Year 4B Unit 12 p155-159**	Area Perimeter Metre Centimetre Metric Imperial Regular Irregular	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres including using the relations of perimeter or area to find unknown lengths **+/-** Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.
	Mass • **Additional Teaching Point 1 :** use measure to read, write and compare numbers up to 3 decimal places • **Additional Teaching Point:** Reading different scales	**Link to decimals - Using measure per se self-resourced** **Self-Resourced**	Convert Mass Kilogram Gram Divisions/intervals balance	To read, write, order and compare numbers with up to three decimal places and use measure to solve problems involving number up to three decimal places
	Capacity • **Inspire Teaching Point 1:** state that the volume of a cuboid is Length x Width x Height • **Inspire Teaching Point 2:** find the volume of a cube and cuboid • **Inspire Teaching Point 3:** recognise that 1 litre or 1000ml is equal to 1000cm3 • **Inspire Teaching Point 4**: Solving problems about containers equivalency	**Inspire Year 5B Unit 8 p278 - 281** **Inspire Year 5B Unit 8 p282 – 285** **Inspire Year 5B Unit 8 p286-292**	Convert Capacity Volume Litres Millilitres Measuring cylinder Divisions/intervals	Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
	Time • **Teaching Point 1:** Solve problems involving addition and subtraction of time • **Teaching Point 2:** Converting between units of time • **Teaching Point 3:** Reading timetables – duration of time • **Teaching Point 4:** To convert time between weeks and days	**Self-resourced** (White Rose Maths	Minute (hand) Hour (hand) Analogue/digital clock Convert Duration	To solve problems involving converting between units of time

	(Inspire 4B 24 hour clock)	Y5 Summer Term week 9-10 Converting Units)	timetable	To use all four operations in problems involving time and money, including conversions (for example, days to weeks, expressing the answer as weeks and days
Measurement: Converting units				To understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
Geometry	**Properties of Shape** • **Inspire Teaching Point 1:** Naming angles; an angle is made when two straight lines meet at a point (or vertex). • **Inspire Teaching Point 2:** A unit of measurement of angles is the degree. • **Inspire Teaching Point 3:** To draw an angle we need a protractor and a ruler; a protractor has two scales: inner and outer • **Inspire Teaching Point 4:** Identify and name angles on a straight line • **Inspire Teaching Point 5:** Recognise the sum of angles on a straight line is 180º • **Inspire Teaching Point 6:** Recognise the sum of angles at a point is 360º • **Inspire Teaching Point 7:** Identify and name cubes, cuboids, prisms, pyramids, cylinders and cones • **Inspire Teaching Point 8:** Identify and number the faces of a solid • **Inpsire Teaching Point 9:** Identify the nets of a cube, a cuboid, a prism and a pyramid and to identify the solid from a given net	**Inspire Year 4A Unit 6** Understanding angles p. 186 **Inspire Year 4A Unit 6** Understanding angles p. 187 - 189 **Inspire Year 4A Unit 6** Drawing angles p. 190 – 192 **Inspire Year 5B Unit 11** Angles on a straight line p.154-158 **Inspire Year 5B Unit 11** Angles on a straight line p.154-158 **Inspire Year 5B Unit 11** Angles at a point p.159-163 **Inspire Year 6A Unit 3 p66-p70** **Inspire Year 6A Unit 3 p71-p77**	Angle Right angle Obtuse Acute Protractor Inner scale Outer scale Degrees Parallel Perpendicular	know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles draw given angles, and measure them in degrees (o) identify: angles at a point and one whole turn (total 360o) angles at a point on a straight line and 2 1 a turn (total 180o) other multiples of 90o Pupils should be taught to: identify 3-D shapes, including cubes and other cuboids, from 2-D representations use the properties of rectangles to deduce related facts and find missing lengths and angles distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
Geometry	**Position and direction** • **Teaching Point 1:** Identify position in the first quadrant using co-ordinates • **Teaching Point 2:** Reflection in the first quadrant • **Teaching Point 3:** Reflection with coordinates in the first quadrant • **Teaching Point 4:** Translation • **Teaching Point 5:** Translation with coordinates in the first quadrant	**Self-Resourced**	x-axis y-axis perpendicular parallel coordinates translation reflection quadrant	To 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

				To recognise and use reflection and translation in a variety of diagrams, including continuing to use a 2-D grid and coordinates in the first quadrant. Reflection should be in lines that are parallel to the axes.
Statistics	• **Inspire Teaching Point 1:** read and present simple data presented in a table • **Inspire Teaching Point 2:** Read and interpret line graphs. • **Inspire Teaching Point 3:** Use line graphs to solve problems. • **Additional Teaching Point 1:** Two-way tables • **Additional Teaching Point 2:** Reading and understanding Timetables	**Inspire 4a p107-p114** **Inspire 4a p115-p119** **Inspire 4a p120-p122** **Self-Resourced** **Self-Resourced**	data Tally chart Bar chart/graph Interpret Table Timetable Line graph Carroll diagram	To solve comparison, sum and difference problems using information presented in a line graph. 1.28 To complete, read and interpret information in tables, including timetables. They begin to decide which representations of data are most appropriate and why

YEAR 5 ENGLISH – Reading

Objectives	National Curriculum Objectives
Content Domains	
2a give / explain the meaning of words in context 2b retrieve and record information / identify key details from fiction and non-fiction 2c summarise main ideas from more than one paragraph 2d make inferences from the text / explain and justify inferences with evidence from the text 2e predict what might happen from details stated and implied 2f identify / explain how information / narrative content is related and contributes to meaning as a whole 2g identify / explain how meaning is enhanced through choice of words and phrases 2h make comparisons within the text	**Reading - Word Reading** Apply phonic knowledge and skills as the route to decode words; respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes, including, where applicable, alternative sounds for graphemes; read accurately by blending sounds in unfamiliar words containing GPCs that have been taught; read common exception words, noting unusual correspondences between spelling and sound and where these occur in the word; read words containing taught GPCs and –s, –es, –ing, –ed, –er and –est endings; read other words of more than one syllable that contain taught GPCs; read words with contractions [for example, I'm, I'll, we'll], and understand that the apostrophe represents the omitted letter(s); read aloud accurately books that are consistent with their developing phonic knowledge and that do not require them to use other strategies to work out words; re-read these books to build up their fluency and confidence in word reading. **Reading - Comprehension** Develop pleasure in reading, motivation to read, vocabulary and understanding by: listening to and discussing a wide range of poems, stories and non-fiction at a level beyond that at which they can read independently; being encouraged to link what they read or hear read to their own experiences; becoming very familiar with key stories, fairy stories and traditional tales; retelling them and considering their particular characteristics; recognising and joining in with predictable phrases; learning to appreciate rhymes and poems, and to recite some by heart; discussing word meanings, linking new meanings to those already known Understand both the books they can already read accurately and fluently and those they listen to by: drawing on what they already know or on background information and vocabulary provided by the teacher; checking that the text makes sense to them as they read and correcting inaccurate reading; discussing the significance of the title and events; making inferences on the basis of what is being said and done; predicting what might happen on the basis of what has been read so far Participate in discussion about what is read to them, taking turns and listening to what others say; explain clearly their understanding of what is read to them.
Word Reading including decoding (Phonics - following Letters and Sounds)	
• Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet • Read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word. • Attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words. • Re-read and read ahead to check for meaning.	
Comprehension: retrieval, deduction, inference, prediction, summarising, exploring authorial intent	
• Become familiar with and talk about a wide range of books, including myths, legends and traditional stories and books from other cultures and traditions and know their features. • Read non-fiction texts, and identify purpose and structures and grammatical features and evaluate how effective they are. • Identify significant ideas, events and characters, and discuss their significance. • Learn poems by heart, for example, narrative verse, haiku etc. • Prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone, volume and action. • Use meaning-seeking strategies to explore the meaning of words in context and to explore the meaning of idiomatic and figurative language. • Identify and comment on writer's use of language for effect, e.g. precisely chosen adjectives, similes and personification. • Identify grammatical features used by a writer – rhetorical questions, varied sentence lengths, varied sentence starters, empty words – to impact and have effect on the reader. • Draw inferences such as inferring characters' feelings, thoughts and motives from their actions. • Justify inferences with evidence from the text and make predictions from what has been read. • Summarise the main ideas drawn from a text. • Distinguish between statements of fact and opinion. • Retrieve, record and present information from non- fiction texts	
Reading Range (including poetry and performance)	
• Increase their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions • Identify and discuss themes and conventions in and across a wide range of writing • Learn a wider range of poetry by heart, prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience	

YEAR 5 ENGLISH – Writing

Teachers should refer to this curriculum alongside, English Appendices 1 and 2 from Programmes of Study as well as the Reading curriculum and Spoken Language curriculum

<table>
<tr><th colspan="6">Objectives</th><th>National Curriculum Objectives</th></tr>
<tr><td colspan="6">Writing in non-fiction form</td><td rowspan="6">Composition
- Plan their writing by: identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own; noting and developing initial ideas, drawing on reading and research where necessary;
- In writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed
- Draft and write by: selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning; in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action; précising longer passages; using a wide range of devices to build cohesion within and across paragraphs; using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]
- Evaluate and edit by: assessing the effectiveness of their own and others' writing; proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning; ensuring the consistent and correct use of tense throughout a piece of writing; ensuring correct subject and verb agreement when using singular and plural; distinguishing between the language of speech and writing and choosing the appropriate register
- Proof-read for spelling and punctuation errors
- Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear

Vocabulary, grammar and punctuation (refer to English Appendix 2)
- Develop their understanding of the concepts set out in English Appendix 2 by: recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms; using passive verbs to affect the presentation of information in a sentence; using the perfect form of verbs to mark relationships of time and cause; using expanded noun phrases to convey complicated information concisely; using modal verbs or adverbs to indicate degrees of possibility; using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun; learning the grammar for years 5 and 6 in English Appendix 2
- Indicate grammatical and other features by: using commas to clarify meaning or avoid ambiguity in writing; using hyphens to avoid ambiguity; using brackets, dashes or commas to indicate parenthesis; using semi-colons, colons or dashes to mark boundaries between independent clauses; using a colon to introduce a list; punctuating bullet points consistently
- Use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading

Terminology: modal verb, relative pronoun relative clause
parenthesis, bracket, dash cohesion, ambiguity</td></tr>
<tr><td colspan="6">Plan, draft, write, revise & edit - write for a range of purposes and audiences, selecting language that shows good awareness of the reader (e.g. clarity of explanations and appropriate level of formality in speech writing).</td></tr>
<tr><td colspan="6">Writing narratives</td></tr>
<tr><td colspan="6">Plan, draft, write, revise & edit - narrative writing that describes settings, characters and atmosphere
Begin to convey character and advance the action through dialogue, maintaining a balance of speech and description
Select vocabulary and grammatical structures that are appropriate for the audience and purpose (e.g. sentence types, tenses, verb forms, relative clauses).</td></tr>
<tr><td>Cohesion</td><td>Verb tenses</td><td>Vocabulary</td><td>Sentence</td><td>Text organisation</td><td>Punctuation</td></tr>
<tr><td>Link ideas across paragraphs using adverbials of time [e.g. later], place [for example, nearby] and number [for eg. secondly] or tense choices [e.g. he had seen her before]</td><td>Use verb tenses consistently

Use the passive to affect the presentation of information in a sentence [e.g. I broke the window in the greenhouse versus The window in the greenhouse was broken (by me)]</td><td>Refer to vocabulary from Y3 & Y4

Convert nouns or adjectives into verbs using suffixes [e.g., –ate; –ise; –ify]

Use verb prefixes [e.g. dis–, de–, mis–, over– and re–]</td><td>Use subordinate clauses and relative clauses (e.g. beginning with who, which, where, when, whose, that, or an omitted relative pronoun)

Indicate degrees of possibility using adverbs [e.g. perhaps, surely] or modal verbs [e.g. might, should, will, must]</td><td>Experiment with the order of sections and paragraphs to achieve different effects

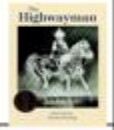
Use varied structures to shape and organise texts coherently

Use layout devices [e.g. headings, sub-headings, columns, bullets, or tables, to structure text]</td><td>Use the semi-colon, colon and dash to mark the boundary between clauses

Use brackets, dashes or commas to indicate parenthesis

Use commas to clarify meaning or avoid ambiguity</td></tr>
</table>

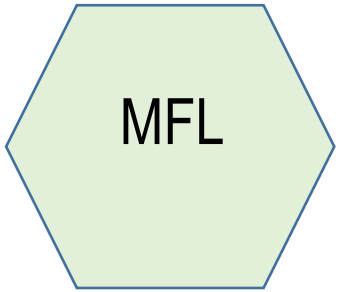
Spelling (see Appendix English 1 from Programmes of Study)	
- Use further prefixes and suffixes and understand the guidance for adding them - Spell some words with 'silent' letters [for example, knight, psalm, solemn] - Continue to distinguish between homophones and other words which are often confused - Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1 - Use dictionaries to check the spelling and meaning of words - Use the first three or four letters of a word to check spelling, meaning or both of these - In a dictionary - Use a thesaurus	
Handwriting	
- Write legibly, fluently and with increasing speed by: - choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters - choosing the writing implement that is best suited for a task.	

High quality text suggestions:				
The Viewer by Shaun Tan (History & Geography) 	*The Man Who Walked Between the Towers by Mordecai Gerstein (Geography & Science)* 	*The Fastest Boy in the World by Elizabeth Laird (Geography & PSHME)* 	*The Skies Above My Eyes by Charlotte Guillman (Science)* 	*Who Let the Gods Out by Max Evans (History)* 
The Adventures of Odysseus (History) 	*What A Waste by Jess French (Geography)* 	*The Highway Man by Alfred Noyse (History)* 	*Hidden Figures by Simon Bartram (Science, History)* 	*The Boy at the Back of the Class by Onjali K Rauf* 
The Bone Sparrow by Zara Fraillon (Geography, Citizenship) 	*The Tempest by Shakespeare and Helen Street (Geography & History)* 	*The Breadwinner by Deborah Ellis (Geography, Rights Respecting)* 	*The London Eye Mystery by Siobhan Dowd (PHSME, Geography)* 	*Love that Dog by Sharon Creech (Poetry, PSHME)* 

Spoken Language Curriculum, including Drama for Year 1 – Year 6

Objectives						National Curriculum objectives Years 1-6
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	Pupils should be taught to:
Speaking Describe incidents from their own experience in an audible voice	**Speaking** Speak with clarity and use appropriate intonation when reading texts aloud Explain ideas and processes using appropriate and adventurous vocabulary Develop understanding through predicting, imagining and exploring ideas	**Speaking** Explain process or present information, ensuring that items are clearly sequenced, relevant details are included and accounts are ended effectively Develop understanding through speculating, hypothesising, imagining and exploring ideas	**Speaking** Build on vocabulary in order to give detailed explanations Tell stories effectively and convey detailed information coherently for listeners with an increasing command of standard English Respond appropriately to the contributions of others in light of differing viewpoints Develop understanding through speculating, hypothesising, imagining and exploring ideas	**Speaking** Use the techniques of dialogic talk to explore ideas, topics or issues Use and explore different question types and different ways words are used, including in formal and informal contexts Present a spoken argument, sequencing points logically, defending views with evidence and making use of persuasive language	**Speaking** Use the techniques of dialogic talk to explore ideas, topics or issues Use a range of oral techniques to present persuasive arguments and engaging narratives Participate in whole-class debate using the conventions and language of debate, including standard English Present a spoken argument, sequencing points logically, defending views with evidence and making use of persuasive language Continue to develop understanding through speculating, hypothesising, imagining and exploring ideas	• listen and respond appropriately to adults and their peers • ask relevant questions to extend their understanding and knowledge • use relevant strategies to build their vocabulary • articulate and justify answers, arguments and opinions • give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings • maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments • use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas • speak audibly and fluently with an increasing command of Standard English • participate in discussions, presentations, performances, role play, improvisations and debates • gain, maintain and monitor the interest of the listener(s) • consider and evaluate different viewpoints, attending to and building on the contributions of others • select and use appropriate registers for effective communication.
Listening & responding Listen with sustained concentration, building new stores of words in different contexts Listen to and follow instructions accurately	**Listening & responding** Listen to others in class, ask relevant questions and follow instructions Listen to an adult and remember some specific points and identify what they've learned	**Listening & responding** Listen to others in class, ask relevant questions and follow instructions Listen to an adult and remember some specific points and identify what they've learned	**Listening & responding** Listen to a speaker, make notes on the talk and use notes to develop a role-play or improvisation Compare the different contributions of music, words and images in short extracts from TV programmes	**Listening & responding** Identify some aspects of talk which vary between formal and informal occasions Identify different question types and evaluate their impact on the audience Analyse the use of persuasive language	**Listening & responding** Make notes when listening for a sustained period Analyse and evaluate how speakers present points effectively through use of language and gesture Listen for language variation in formal and informal contexts Identify the ways spoken language varies according to differences in the context and purpose of its use	

Group discussion Take turns to speak, listen to other's suggestions and talk about what they are going to do Ask and answer questions, make relevant contributions, offer suggestions and take turns	**Group discussion** Ensure that everyone contributes, allocate tasks, and consider alternatives and reach agreement	**Group discussion** Use talk to organise roles and action Actively include and respond to all members of the group	**Group discussion** Take different roles in groups and use the language appropriate to them, including roles of leader, reporter, scribe and mentor	**Group discussion** Plan and manage a group task over time using different levels of planning Understand different ways to take the lead and support others in groups Understand the process of decision making	**Group discussion** Understand and use a variety of ways to criticise constructively and respond to criticism Understand different ways to take the lead and support others in groups Understand the process of decision making	
Drama Explore appropriate themes through improvisation and role play	**Drama** Explore appropriate themes through improvisation and role play	**Drama** Explore appropriate themes through improvisation and role play Create roles showing how behaviour can be interpreted from different viewpoints	**Drama** Explore appropriate themes through improvisation and role play Create roles showing how behaviour can be interpreted from different viewpoints	**Drama** Reflect on how working in role helps to explore complex issues Improvise using a range of drama strategies and conventions to explore themes such as hopes, fears and desires	**Drama** Reflect on how working in role helps to explore complex issues Improvise and devise a performance considering how to adapt the performance for a specific audience	



Throughout the Brindishe Federation, children are taught how to speak primarily **SPANISH.** In some year groups, teachers may choose to teach additional languages which suit their current class topic.

EYFS & KS1 will focus mainly on the 1st two objectives through language exploration as part of their daily provision.
By the end of KS2, teaching and learning will have included all of The National Curriculum objectives. Where these are age specific is noted in the year group document below.

Resources

Audio stories in different languages:
https://www.thefablecottage.com/
https://www.thespanishexperiment.com/ **(just in Spanish)**

Radio clips: https://www.bbc.co.uk/programmes/articles/4FDrPw6jzlxpYKq0WsbS8J3/mfl-ks2-spanish-mi-madrid

BBC bitesize resources – video clips, songs, stories and poems: https://www.bbc.co.uk/bitesize/subjects/zxsvr82

Spanish games: http://www.crickweb.co.uk/ks2spanish.html

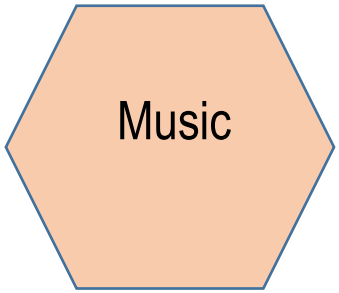
YEAR 5 MFL (Spanish)

Subject content	Objectives	Themes and vocabulary	Country/Influential figure	NC Objectives
Speaking and Listening	• Revise and continue with Y3/4 objectives plus: • Listen attentively and understand more complex phrases and sentences. • Speak in sentences, using familiar vocabulary, phrases and basic language structures. • Engage in conversations involving multiple phrases. • Ask and answer questions • Express opinions and respond to those of others • Listen to and respond to stories, songs, rhymes and poems	pets animals colours sizes meals food drink shopping.	Mexico/Guatemala Frida Kahlo Diego Rivera Damian Ortega Mariachi bands	• broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through the use of a dictionary • write phrases from memory, and adapt these to create new sentences, to express ideas clearly • describe people, places things and actions orally and in writing • read carefully and show understanding of words, phrases and simple writing • engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help* • speak in sentences, using familiar vocabulary, phrases and basic language structures • develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases • appreciate stories, songs, poems and rhymes in the language
Reading and Writing	• Revise and continue with Y3/4 objectives plus: • Write simple phrases from memory • Write words, phrases and short sentences using a model • Read words and phrases carefully and pronounce them accurately so that others can understand • Manipulate language by changing an element in a sentence – e.g. Tengo un hermano – tengo dos hermanos			
Intercultural understanding	• Revise and continue with Y3/4 objectives plus: • Recognise and understand similarities and differences between people and places associated with, for example, different faith traditions and cultural heritages in the wider and global community – e.g. how festivals such as Christmas are celebrated differently around the world, structure of a school day.			
Knowledge about language	• Revise and continue with Y3/4 objectives plus: • Begin to know the gender of some common nouns – e.g. la mesa, el perro • Use dictionaries to expand knowledge of vocabulary and to support independent learning of a new language			

Year 5 Art

Subject content	Objectives	Vocabulary	Themes and Suggested Artists	NC Objectives
Design, Evaluate and Develop	• Use sketchbooks to plan, record, develop, annotate & critically review ideas and artwork. • Develop visual literacy by examining the way feelings and emotions, are communicated by the artist. • Develop language to describe, modify and evaluate work on-going • Talk about processes involved in own work. • Select and record first hand observations as well as from secondary sources. • Develop observational work i.e. examine proportion, shape and space from direct experience. • To select visual information about a chosen topic and research independently. • Find inspiration, compare ideas, methods and approaches in their own work and that of others and express opinions. • Use the appropriate language of art and design to express a preference and include in discussion/explanation • Be exposed to and develop an understanding of the importance of a diverse range of art, artists, craft makers and designers from around the world. • Understand the cultural, social and historical development of art forms • To experience art in situ by visiting galleries and museums to link with a particular theme, skill or movement. • Begin to develop a knowledge of major schools of art and their proponents • Begin to assess their own artwork against given criteria	Evaluate, observe, properties, self-assess, annotate, adapt, starting point, sources, role and purpose, critically analyse, compare ideas, compare methods, symbolic, subtle, vibrant, representation, contrast, reflect, develop further.	Mexico Maya Frieda Kahlo Diego Rivera Modern Greece Ancient Greece Narrative Poetry e.g. The Lady Of Shalott Take One Picture project – Penelope and her Suitors by Pintoricchio	• To be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design. • To create sketchbooks to record their observations and use them to review and revisit ideas. • To improve their mastery of art and design techniques with a range of materials. • To find out about great artists, architects and designers in history.
Media and techniques				
Drawing	• Use a variety of tools together or separately: pencil (all grades), aquarelle, pastel, charcoal, etc. to make lines, shapes and marks on different surfaces e.g. different grades and colours of paper, acetate, chalk on playground floor, etc. • Explore and draw shapes from observation; invent new shapes. • Investigate tone by drawing light/dark lines, shading, patterns and shapes. • Investigate texture further by describing, naming and using e.g. rubbing (frottage) and cross hatching techniques. • Produce increasingly freehand accurate drawings of people e.g. eyes, faces, hands • Begin to understand the concept of perspective.	**Pencil grades**: HB, B, 2B, 4B, 6B **Perspective:** representing 3D objects on 2D surface that looks natural **Freehand**- drawn without guiding instruments or measurement.	Leonardo Da Vinci Vincent Van Gogh Poonac	

Painting	• Use a variety of paints: watercolour, ink, poster, water based acrylics, fabric, aquarelle/water soluble and experiment with differing effects and dilutions. • Use a variety of tools: paintbrushes of different types (bristle and shape) and sizes to make lines, shapes and marks on a variety of surfaces e.g. different grades and colours of paper, canvas, fabric etc. • Know how to preserve tools e.g. cleaning and storing of paintbrushes using water with/without detergent. • Begin to understand and use the techniques and vocabulary appropriately: hue, tint, tone, shade and mood • Begin to explore the use of texture in colours. • Use colour notes effectively /precisely e.g. swatches/shade cards • Consider the effect of light and shadow. • Use colour for specific purpose e.g. to convey a mood, emulate an artists palette choices e.g. Mondrian, Lowry	**Secondary colours** **Complementary colours** **Wash** (on surface of paper) **Hue**: name of colour Intensity (high/low): strength of colour or faintness of colour. **Tint**: A colour mixed with white. **Shade:** A colour mixed with black **Tone:** How light falls on an object i.e. highlights (light is strongest, shadows (light is reduced). **Line:** horizontal, vertical, diagonal, thick, thin, straight, curved.	Jackson Pollock Marc Chagall Frida Kahlo Impressionists Pointillism Georges Seurat Bridget Riley	
Printing	• Design and make printing blocks e.g. polystyrene tile, layers of card to create a relief block • Create own abstract patterns to reflect personal experiences/expression. • Create printed patterns for purposes e.g. decorate fabric • Combine prints – different tiles or work collaboratively with others.	**Relief:** Printing from a raised image.	Andy Warhol Pop Art Matisse Jazz Book	
3D	• Explore line, shape and pattern in 3D • Use clay slab to create a relief sculpture e.g. a decorative tile. • Score the clay surface to prepare for joining two or more pieces. • Handle tools appropriately and join using slip. • Use wire to make an armature as a basic structure for sculpture • Cut and use mod roc or paper machė to cover armature. • Embellish work /use finishing techniques	**Slab**: flat piece of clay **Scoring**: roughen the surface for joining **Glaze:** paint onto dried/fired clay to finish off e.g. shiny or matt surface. **Armature**: wire /twisted paper/cardboard etc structure to be covered with another material. **Embellish** – decorate/ornamentation of product.	Pablo Picasso Barbara Hepworth Alberto Giacommetti	
Mixed Media (including collage)	• Use combination of known techniques to produce collage. • Plan and experiment with media and effects. • Select and combine materials to embellish fabrics or paper to produce collage e.g. embroider, fabric paint. • Make fabrics – weaving looms, felt • Decorate fabrics using paints and inks	**Collage**: paper, photographs, fabric and other ephemera are stuck to a supporting surface. **Decoupage**: gluing paper cut outs onto a surface.	Faith Ringgold	



The Key Musical Elements

The musical elements are the building blocks of music. The skills and objectives outlined below seek to develop children's awareness of and sensitivity to each of these elements. The musical elements are interrelated and children's understanding of these concepts will deepen over time. Each element is present in most musical activity, but some lessons may focus on a single element.

Pulse: Can you feel the heartbeat?

Rhythm: Can you hear repeated patterns?

Pitch: Is the sound high or low?

Dynamics: Is the sound loud or soft?

Tempo: Is the sound fast or slow?

Timbre: How does the sound feel in your ears?

Structure: What can you hear first, next and after that?

Texture: How many sounds can you hear?

The vocabulary words for each year group are not exhaustive and are designed to build on previous years' learning. You may like to ensure your children are confident using words from the preceding year when discussing and appraising the music they hear and play.

YEAR 5 MUSIC

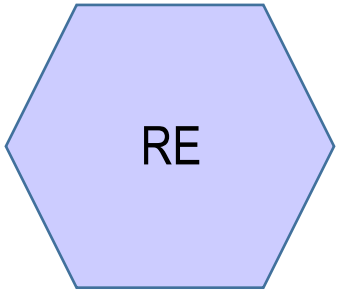
Subject content	Objectives	Vocabulary	Key Musical Elements	NC Objectives
Listening and Responding	• Listen to and discuss a broad and diverse range of musical styles and traditions and begin to place the music in its historical context • Start to identify musical style indicators for a range of styles, e.g. rock, jazz, pop, hip-hop, Motown • Understand and discuss the musical elements when appraising and evaluating a piece of music, with increasing focus on **timbre**, **structure** and **texture.** Begin to use formal musical terms to describe **dynamics** and **tempo**. • Discuss families of instruments, e.g. brass, woodwind, strings, and begin to distinguish the main instrument heard in a piece • Respond imaginatively to music in a variety of ways, e.g. movement, dance, mime, poetry, writing, art • Reproduce simple and more detailed rhythmic and melodic sequences based on familiar songs and rhythms	Brass Woodwind Strings Percussion Ensemble Ostinato (repeated pattern) Unison (all together) Canon / round (one after another) Harmony (two or more melodies played together) Chord (two or more notes played at the same time) Octave (higher or lower versions of the same note) Tempo: Allegro (fast), andante (slow), largo (very slow) Dynamics: Forte (loud), piano (soft) Crescendo (getting louder) Diminuendo (getting softer) Timbre: Staccato (spiky), legato (smooth)	Pulse Rhythm Pitch Dynamics Tempo Timbre Structure Texture	Pupils should be taught to: • play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression • improvise and compose music for a range of purposes using the inter-related dimensions of music • listen with attention to detail and recall sounds with increasing aural memory • use and understand staff and other musical notations • appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians • develop an understanding of the history of music.
Improvising and Composing	• Recall, answer and invent melodic and rhythmic patterns, using voices, body percussion and instruments • Understand that musical improvisation means free play in the context of a piece, in contrast to composition (recording or writing pieces). • Improvise and perform in solo and ensemble contexts; use quality not quantity of notes! • Continue to explore and use a range of simple sounds, patterns and melodies (vocal, body percussion, tuned/untuned instruments, digital) to purposefully support other learning across the curriculum, e.g. a melody played to represent a character or event in a story; sounds inspired by a picture • Select appropriate instruments and how to play them to show control of **timbre** • Recognise and use staff notation to read and play rhythms and melodies with increasing confidence			
Performing and Sharing	• Understand the importance of warming up the voice using a range of sounds that the singing voice and the speaking voice can make • Record compositions using graphic scores or staff notation, so that they can be used to repeat and perform music-making • Prepare and perform musical pieces with confidence and accuracy for an audience, e.g. small groups performing in class or wider school opportunities like assemblies and shows • Use their singing voices expressively as an ensemble, showing a deeper understanding of how to improve their performance musically • Perform, as part of an ensemble, songs that may include simple canons/rounds, rhythmic ostinatos (a repeated pattern) or harmony parts • Describe and evaluate their own music-making and performance, showing respect for each other's musical ideas and efforts			

YEAR 5 HISTORY

Subject content	Objectives	Vocabulary	Theme/period/influential figure/possible visits.	NC Objectives
The Ancient Greeks	• Identify Ancient Greece on a timeline and compare this to prior history learning. • Examine Greek artefacts (such as vases) and use these to make inferences about the past. • Describe how Greek artefacts and ruins tell us about their culture, military and religious beliefs. • Describe how Greek society has had an impact on modern society. • Discuss the notion of democracy – compare the democratic process of ancient Greece with that of Modern Britain and other forms of democracy across the world. Why do we focus on ancient Greek democracy? • Examine the timeline of Greek civilisation with what was happening in Britain at the same time. • Place the chronology of key events of the Greek civilisation on a timeline with a chronology of the History of Britain. • Describe the ideas, beliefs and attitudes of all groups of people in the Greek civilisation. • Compare the expansion of the Greek empire with the British Empire under Queen Victoria.	acropolis, archaeologist, architecture, chronology, circa, citadel, civilisation, climate, continent, culture, deity, democracy, empire, fertile, invasion, merchant, military, mythology, philosophy, polis, polytheists, seafaring, society, trade, urban, warfare	**Places** Athens Sparta **Visits** British Museum Horniman – some Ancient Greek artefacts	• Continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. • Note connections, contrasts and trends over time and develop the appropriate use of historical terms. • Regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. • Construct informed responses that involve thoughtful selection and organisation of relevant historical information. • Understand how our knowledge of the past is constructed from a range of sources.
The Mayans	• Identify Mayans on a timeline and compare this to prior history learning. • Examine a variety of sources and use these to make inferences of the past – in particular about Mayan economy, culture, religious beliefs and society. • Describe how the Mayan civilisation has had an impact on modern society. • Examine the timeline of Mayan civilisation with what was happening in Britain at the same time. • Place the chronology of key events of the Mayan civilisation on a timeline with a chronology of the history of Britain. Where are the overlaps? • Compare the Mayans with the Greek and Egyptian civilisations. • Describe the ideas, beliefs and attitudes of all groups of people in the Mayan civilisation. • Use appropriate vocabulary to communicate about the Mayans. • Discuss why Western culture promotes the idea that some inventions happened there when they have been used for thousands of years in other places e.g. Mayans inventing the concept of 0; using astronomy to map the globe; invented vulcanized rubber.	archaeologist, architecture, Chichen Itza, chronology, circa, civilisation, climate, continent, culture, deforestation, deities, demise, drought, economy, erosion, fertile, hierarchy, Indigenous, Mayan, merchant, Mesoamerica, plaza, polytheists, society, trade.	**Visits** British Museum Horniman –some Mayan artefacts	Ongoing Skills • Ask perceptive questions and think critically. • Weigh evidence and sift arguments. • Develop perspective and judgement. • Make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts. • Understand the methods of historical enquiry.

YEAR 5 GEOGRAPHY

Subject content	Objectives	Vocabulary	Influential figures/Visits	NC Objectives
Locational Knowledge	• Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere	latitude, longitude, Equator, hemisphere		• Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. • They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.
Place Knowledge	• Understand geographical similarities and differences through the study of human and physical geography of South America contrasted with the United Kingdom. • Understand how communities are diverse, the reasons they are changing, and how they are interconnected with their environment.	immigration, refugee, migrate, population		
Human and Physical geography	• Understanding the importance of, and relationships between the water cycle and different climate zones. Explain and demonstrate how they work and impact the physical world. • Link these processes to climate change. • Analyse human impact on the environment and how this relates to climate change and sustainability.	climate zones, biomes, vegetation belts, water cycle, evaporation, precipitation, transpiration, condensation, percolation, ground water, surface runoff, climate change, pollution, sustainability	Aditya Mukarji	**Ongoing processes/skills** • Formulate enquiry questions; using geographical vocabulary; fieldwork to collect, record and present data; make comparisons between human and physical characteristics; use and draw thematic maps; map and compass symbols
Geographical skills	• Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. • Understand standard map symbols and locate features on a map. • Develop field work skills through field sketches, photo taking with annotations, gathering and presenting data through charts/diagrams. • Use 8 point compass directions and 6 figure grid to support evidence.	north, south, east, west, compass, scale, legend, key, grid reference		



Brindishe Schools follow the Lewisham Agreed Syllabus for Religious Education.

Key Stage 1 Breadth of study - During the two years of Key Stage 1, pupils in Lewisham schools should be taught the knowledge, skills and understanding through the following areas of study:

Religions and beliefs and compulsory units

a) Christianity for Key Stage 1. Set out as four half - termly units
b) Two other principal religions from the content provided for Buddhism, Hinduism, Islam, Judaism and Sikhism, one of which should be a religious community with a significant local presence in and around the school –schools must select the first two units of each of the two faiths they choose = 4 half termly units in all.
c) A secular world view, where pupils introduce this from their own experience as appropriate; and
d) The Natural World statutory unit (year 1 term 1)

Plus three of the four following Key Stage 1 Optional Units:

- Belonging / Who am I?
- Right and Wrong
- Sharing Food
- Weddings

Key Stage 2 Breadth of study - During this key stage, pupils in Lewisham schools should be taught the knowledge, skills and understanding through the following areas of study:

a) Christianity for Key Stage 2; this is set out as 5 half term units
b) five other principal religions – Buddhism, Hinduism, Islam, Judaism and Sikhism. Schools should teach the remaining two units from those faiths introduced in KS1 and all four units from the other 3 faiths that have not yet been studied, totalling 16 half termly units
c) a secular world view, where appropriate

Plus the following statutory units:

- The Journey of life and death
- Peace (to be taught in year 3)
- Understanding faith and belief in Lewisham

The units for every faith in Key Stages 1 and 2 have been developed in partnership between Faith and Belief communities, teachers and RE professionals to be taught in the order that they are numbered so that learning is scaffolded to develop knowledge, understanding and concepts. In Key Stage 1 the first unit to teach is The Natural World Unit.

Teachers should refer to the Lewisham Agreed Syllabus for further planning.

https://lewisham.gov.uk/myservices/education/schools/religious-education-in-schools/religious-education-syllabus-for-schools-in-the-borough

YEAR 5 RE

Subject content	Lewisham Agreed Syllabus Objectives	Key Questions	Theme/influential figures/visits/celebrations
Islam 3 - Ramadan and Id ul Fltr	**Sawm** ▪ Ramadan – a time to focus on Allah, being a good Muslim and considering those who have less. ▪ Qur'anic quotes about fasting. ▪ Fasting and eating in Ramadan. ▪ Worship during Ramadan ▪ Id ul Fitr – celebration of keeping the fast at its end. ▪ Zakat al Fitr ▪ Charity at Id.	Why do Muslims fast during Ramadan? How does fasting help Muslims to grow closer to Allah and to each other? How do Muslims celebrate Id?	**Visit/Visitor** Local community member. **Celebrations** Ramadan Id ul Fltr
Islam 4 - Hajj and Id ul Adha	Story of Prophet Ibrahim (pbuh) and his son Ismail (pbuh) rebuilding the Ka'aba. Umrah (lesser pilgrimages. Not fixed to time). Qur'anic quotes about Hajj Hajj requirements. **Id ul Adha -** Festival that takes place the day after the gathering of pilgrims on Mount Arafah. A time for Muslims worldwide to celebrate.	What is a pilgrimage? Why do Muslims go on Hajj? Which stories are associated with the places on Hajj? How does the Hajj make Muslims appreciate they are all part of one family?	**Visit/Visitor** **Celebrations** Id ul Adha
Hinduism 4 – Pilgrimage	**The Wider World** Hinduism originated in India. Hindus live across the world. Places of pilgrimage and their significance: – The Ganges – Kailash – Rameswaram Stories associated with places of pilgrimage.	How important is The Holy Ganges and what role does it play in Hindus belief?	**Visit/Visitor** **Celebrations**
Christianity 8 - Jesus human and divine	**God:** • Father, Son and Holy Spirit • Christmas – Jesus' birth. • Choosing 12 disciples AND friends • Jesus' temptations • Jesus' baptism • Miracles and acts of healing e.g. 'Stilling the storm', 'The four friends' or 'Healing a leper' • Easter - Jesus' death, resurrection and afterwards.	Who do Christians believe Jesus to be? What evidence do Christians base their beliefs upon?	**Visit/Visitor** **Celebrations** Easter
Sikhism 4 - Belonging to the community	**Guru Gobind Singh** • The last human Guru. • Celebration of Baisakhi. • Established the Khalsa. • The 5 Ks and Sikh names. **Belonging to the Community -** Becoming a Khalsa'd Sikh. • Amrit ceremony. • Obligations accepted with Amrit - rehat.	Why was Guru Gobind Singh important? What is the significance of the Amrit Ceremony?	**Visit/Visitor** Gurdwara **Celebrations**

Christianity 9 - Leading a Christian life.	Commitment, belonging and belief in the special presence of God during significant life events. Example of at least one person and one charitable organisation that exemplifies Christianity in action. Encounter with one local Christian to share how their life is led by faith	How do Christians follow Jesus and His teachings in their daily lives? What Christian values guide the actions of the people and organisations studied? What are the challenges of living a Christian life today?	**Visit/Visitor** Food bank Charity organisations. **CelebrationS**
Possible Extra Focus	**Christmas (Extra Focus) -** Commercialisation of Christmas.	How and why has Christmas become commercialised? How do Christians try to keep the religious meaning of Christmas?	

YEAR 5 PE

Subject content	Objectives	Vocabulary	Health and Wellbeing	NC Objectives
Invasion Games	• To have an understanding of different positions in a game. • To apply various skills, actions and ideas in order to progress the game. • Shows confidence in using ball skills in various ways, and can link these together. • Uses skills with co-ordination, control and fluency. • Apply basic skills for attacking and defending. • Uses running, jumping, throwing and catching in isolation and combination. • Understand the need for different tactics and select appropriately for attacking and defending in different games.	***(refer to vocab from previous years to ensure appropriate progression)*** co-ordination, control and fluency, positioning,	**Social me:** I can analyse and comment on skills and techniques. **Healthy me:** Can I identify some of the long-term effects of exercise and activity on physical, mental and social health? **Thinking me:** I can select and combine skills and techniques and apply these accurately and appropriately. **Emotional me:** Can I use different strategies to manage my emotions appropriately?	Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement. They should enjoy communicating, collaborating and competing with each other. They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success. Pupils should be taught to: • use running, jumping, throwing and catching in isolation and in combination • play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending • develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] • perform dances using a range of movement patterns
Gymnastics	• Select and combine their skills, techniques and ideas. • Apply combined skills accurately and appropriately, consistently showing precision, control and fluency. • Draw on what they know about strategy, tactics and composition when performing and evaluating. • Analyse and comment on skills and techniques and how these are applied in their own and others' work. • Uses more complex gym vocabulary to describe how to improve and refine performances. • Develops strength, technique and flexibility throughout performances. • Links skills with control, technique, co-ordination and fluency. • Understands composition by performing more complex sequences.	star, pike, tuck, dish, straddle, stretch, curl Rolls - forward, backward, log, teddy-bear		
Dance	• Use expression to demonstrate theme and narrative in a dance sequence • Use all the space provided to maximum potential e.g. using various levels, ways of travelling and motifs. • Develop understanding of how dance can be performed in different formations i.e. diamond, circle, squares, line. • Perform movements with an awareness of technique i.e. pointed toes/flex feet to create a fluent sequence with the required style in relation to the stimulus. • Continue to show a change of pace and timing in their movements paying particular focus to choreographic devices i.e. cannon, repetition. • Modifies parts of a sequence as a result of self and peer evaluation using more complex dance vocabulary to compare and improve work. • Incorporate moments to watch/analyse professional dance performances either in theatre or through media.	***(refer to vocab from previous years to ensure appropriate progression)*** **Action:** Gesture, travel, rotation, balance, body parts, stillness **Space:** High/ low, body shapes, surrounding, over, under, around **Dynamics:** Weight: Strong/ light, Time: Sudden/ sustained, Space: direct/ indirect Flow: Bound/ free **Relationship:** Solos, duets, whole class work, counterbalance, simple lifts		

		Chorographic: cannon (movement to mimic domino effect) Unison, improvisation, call / response		• take part in outdoor and adventurous activity challenges both individually and within a team • Compare their performances with previous ones and demonstrate improvement to achieve their personal best
Athletics	• Choose the best pace for a running event in order to sustain running and improve personal target, speed and stamina. • Show control and power at take-off in jumping activities. • Develop increasing accuracy, technique and distance in a range of throwing activities. • Recognise strengths and weaknesses in their own and others performance and suggest ideas that will improve performance. • Appreciate the benefits of practice and reflection to improve personal and group performance. • Can pass and receive a baton accurately.	Hop, Jog, Land/Landing, Jump, Overarm Pathway (direction of travel), Sequence, Skip, Sprint, Standing Jump, Take Off, Underarm Long Jump, Long Distance Running, Pull Throw, Baton Exchange Field event, Flight, Fling Throw, Hurdling, Lead leg, Push Throw, Shot Put, Standing Long Jump, Track event, Trail leg, Crouch Start, Standing Vertical Jump,		

YEAR 5 PSHME

Subject content	Objectives	Vocabulary	DfE Statutory Guidance
Families and people who care for me	• Recognise the role of voluntary, community and pressure groups, especially in relation to health and wellbeing • Recognise if family relationships are making them feel unhappy or unsafe and who to seek support and advice from if needed.	communities, volunteers, voluntary, pressure groups, health, wellbeing friendships, families, acquaintance, couples, positive relationships	• Know that stable, caring relationships, which may be of different types, are at the heart of happy families, and are important for children's security as they grow up. • about different types of bullying (including cyberbullying), the impact of bullying, responsibilities of bystanders (primarily reporting bullying to an adult) and how to get help. • •how to recognise if family relationships are making them feel unhappy or unsafe, and how to seek help or advice from others if needed. • the characteristics of friendships, including mutual respect, truthfulness, trustworthiness, loyalty, kindness, generosity, trust, sharing interests and experiences and support with problems and difficulties. • •that healthy friendships are positive and welcoming towards others, and do not make others feel lonely or excluded. • that most friendships have ups and downs, and that these can often be worked through so that the friendship is repaired or even strengthened, and that resorting to violence is never right. • how to recognise who to trust and who not to trust, how to judge when a friendship is making them feel unhappy or uncomfortable, managing conflict, how to manage these situations and how to seek help or advice from others, if needed. • the importance of respecting others, even when they are very different from them (for example, physically, in character, personality or backgrounds), or make different choices or have different preferences or beliefs. • that in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including those in positions of authority. • that people sometimes behave differently online, including by pretending to be someone they are not • that the same principles apply to online relationships as to face-to- face relationships, including the importance of respect for others online including when we are anonymous • the rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them.
Caring friendships	• Recognise what constitutes a positive, healthy relationship and develop the skills to form and maintain positive and healthy relationships • Recognise ways in which a relationship can be unhealthy and whom to talk to if they need support • Recognise bullying and abuse in all its forms (including prejudice-based bullying both in person, online and through social media) • Know how pressure to behave in unacceptable, unhealthy or risky ways can come from a variety of sources, including people they know and the media	relationships, unhealthy, feelings, empathy, recognising others' feelings, bullying, abuse, prejudice, trolling, dares, pressure, managing pressure, influences, media, peer	
Respecting ourselves and others (including Citizenship)	• Understand that there are basic human rights shared by all peoples and all societies and that children have their own special rights set out in the United Nations Declaration of the Rights of the Child • Know that the universal rights are there to protect everyone and have primacy both over national law and family and community practices • Know that differences and similarities between people arise from a number of factors, including family structures, culture, ethnicity, race, religion, age, gender, gender identity, sexual orientation, and ability (see 'protected characteristics' in the Equality Act 2010) • Realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours (including cyber bullying, use of prejudice-based language, 'trolling', how to respond and ask for help) • Discuss prejudice and discrimination, and respecting diversity, beliefs and practices of others. • Discuss the signs, effects and strategies for dealing with racism, sexism, religious intolerance, xenophobia, homophobia, biphobia and transphobia. • Recognise and challenge stereotypes • Develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves • Discuss and respond, when appropriate, to world events such as natural disasters, protests, terrorist attacks or special occasions.	rights, duties, environment, values, customs, people, difference, diversity, identity, family structures, culture, ethnicity, race, religion, age, gender, gender identity, sexual orientation, ability, racism, sexism, religious intolerance, xenophobia, homophobia, biphobia transphobia, acceptable, unacceptable, communities, volunteers, pressure groups, resolving points of view, anti-social behaviour, aggression, bullying, trolling, debate, discrimination, stereotypes, discussion, natural disasters, protest, terrorist attacks, special occasions.	
Online relationships and internet	• Describe different types of media. Know that media influences people's understanding of the world and can shape ideas about gender and gender roles. • Develop strategies for respectfully challenging opinions they disagree with including inappropriate messages about race, gender and identity online. • Understand that being online means you can collaborate positively with like-minded people, but it is important to seek out information from a range of sources.	social media, information, forwarding, safety, online, personal information, passwords, images, media (different types), acceptable, unacceptable,	

safety and harms	• Know there are people online who want to cause physical and mental harm. Recognise what to do if they see this happen, who to speak to and know it is not a child's fault. • Learn the 'THINK' (is it, True, Helpful, Inspiring, Necessary and Kind) rules, and recognise it is easier to say hurtful things online. • Recognise there are pressures when using technology (gaming scores, being online FOMO). Recognise when they or a friend might need support, and who might provide that support.		• how to critically consider their online friendships and sources of information including awareness of the risks associated with people they have never met • about the concept of privacy and the implications of it for both children and adults; including that it is not always right to keep secrets if they relate to being safe • how to recognise and report feelings of being unsafe or feeling bad about any adult. • how to ask for advice or help for themselves or others, and to keep trying until they are heard • how to report concerns or abuse, and the vocabulary and confidence needed to do so. • that the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health • where and how to report concerns and get support with issues online. • about the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing. • that mental wellbeing is a normal part of daily life, in the same way as physical health. • how to judge whether what they are feeling and how they are behaving is appropriate and proportionate • the importance of self-respect and how this links to their own happiness. • isolation and loneliness can affect children and that it is very important for children to discuss their feelings with an adult and seek support. • the benefits of physical exercise, time outdoors, community participation, voluntary and service-based activity on mental wellbeing and happiness. • the importance of building regular exercise into daily and weekly routines and how to achieve this; for example walking or cycling to school, a daily active mile or other forms of regular, vigorous exercise. • the risks associated with an inactive lifestyle (including obesity). • the importance of sufficient good quality sleep for good health and that a lack of sleep can affect weight, mood and ability to learn • simple self-care techniques, including the importance of rest, time spent with friends and family and the benefits of hobbies and interests • the facts about legal and illegal harmful substances and associated risks, including smoking, alcohol use and drug-taking.
Being safe (including health and prevention and basic First Aid)	• Differentiate between the terms, 'risk', 'danger' and 'hazard' • Recognise how their increasing independence brings increased responsibility to keep themselves and others safe • Develop strategies for keeping physically and emotionally safe including road safety (including cycle safety- the Bikeability programme), and safety in the environment (including rail, water and fire safety). • Recognise what a crime is and how committing a crime can affect lives. • Know how to keep safe on the roads and railways when travelling independently. • Pre-empt what risky situations may arise when home alone or walking home alone and consider ways of keeping safe. • Know that carrying a mobile phone can help you feel safe but it can also make me unsafe. Discuss the risks of carrying a mobile phone • Understand that some strangers may be unsafe and know how to deal with a situation when faced with a stranger trying to communicate with us.	actions, behaviour, consequences, mobile phones, responsibility, safe use, advice, support, asking for help, safety, roads, cycle, rail, water, fire, strangers, danger, risk, safety, emergency aid, help, safety, rules	
Physical and mental wellbeing (including mental health, healthy eating, drugs, alcohol and tobacco)	• Know they have the right to be physically and mentally healthy and a responsibility to keep healthy. • Know what positively and negatively affects their physical, mental and emotional health and who to turn to if they need help. • Know the importance of respecting and caring for themselves and how this links to their own happiness and mental health. • Know the importance of good quality sleep on mental and physical health: know that a lack of sleep can have an impact on weight, mood and ability to learn. • Know that feeling lonely can have negative impact on mental health and the importance of talking to others to seek support. • Know which, why and how, commonly available substances (including alcohol, tobacco and 'energy drinks') can damage their immediate and future health and safety. • Learn about 'change', including transitions, loss, separation, divorce and bereavement	conflicting emotions, feelings, managing feelings, balanced lifestyles, choices, health, wellbeing, drugs, alcohol, tobacco, medicines, caffeine, stimulant, energy drinks, substance, illegal, habit, change, transitions, loss, separation, divorce, bereavement	
Our changing bodies and intimate relationships	• Learn how to take care of their body, understanding that they have the right to protect their body from inappropriate and unwanted contact. • Judge what kind of physical contact is acceptable or unacceptable and how to respond (including hurting, touching private areas, forcing). • Know the right to say 'no' and what is meant by 'consent' • Understand the concept of 'keeping something confidential or secret', and when it is right to 'break a confidence' or 'share a secret' • Know, understand and describe how bodies and emotions change approaching and during puberty • Know that 16 is the legal age of consent to have sex (this includes sexual intercourse, penetrative sex and any sort of sexual touching) but 16 may not necessarily be the right age for someone to start having sex and many people do not have sex for the first time until they are older. • Learn about human reproduction, the main stages of the human lifecycle and the birth process.	privacy, sharing, personal boundaries, confidentiality, secrets, surprises, personal safety, physical contact, touch, acceptable, unacceptable, consent, human reproduction, babies, sexual intercourse, pregnancy, contraception, parents/carers, IVF, gender, gender identity, sexual orientation	

	• Learn that people may choose to have, choose not to have or be unable to have children and that babies can be made in different ways, such as through IVF. • Know it is possible to prevent fertilisation • Appreciate the responsibilities, and be aware of the skills, of parenting • Recognise the difference between, and the terms associated with gender, gender identity and sexual orientation.		

Science

Year 5 (Please note all objectives in bold are statutory and must be taught.)

Content	Objectives	Vocabulary	Scientists	Working Scientifically
Living things and their habitats	• **Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.** • **Describe the life process of reproduction in some plants and animals.**	Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings	Dian Fossey	**During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:** • **planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary** • **taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate** • **recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs** • **using test results to make predictions to set up further comparative and fair tests** • **reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations** • **identifying scientific evidence that has been used to support or refute ideas or arguments.**
	• Classify animals according to their life cycle. • Grow from cuttings and observe whether they grow roots/stem/leaf/flower. • Generate questions such as 'do larger animals have longer gestation periods?' • Research life cycle of a chosen animal and present in a variety of ways.			
Animals, including humans	• **Describe the changes as humans develop to old age.**	Puberty: the vocabulary to describe sexual characteristics	Robert Winston	
	• Develop questions to ask an expert e.g. doctor.			
Properties and changes of materials	• **Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.** • **Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.** • **Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.** • **Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.** • **Demonstrate that dissolving, mixing and changes of state are reversible changes.** • **Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.**	Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve reversible/non-reversible change, burning, rusting, new material	Marie Curie, Spencer Silver	
	• After observing what happens when solids are added to liquids, classify materials based on the outcomes. • Observe rusting with uncoated nails in different liquids. • Compare rates of solubility. • Burn different materials			
Earth and Space	• **Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.** • **Describe the movement of the Moon relative to the Earth.** • **Describe the Sun, Earth and Moon as approximately spherical bodies.** • **Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.**	Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune) spherical, solar system, rotates, star, orbit, planets	Caroline Herschel, Copernicus Ptolemy	
	• Measures shadows throughout the day. • Generate questions to research about Earth and Space.			
Forces	• **Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.** • **Identify the effects of air resistance, water resistance and friction that act between moving surfaces.** • **Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.**	Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears	Heath Robinson, Rube Goldberg, Leonardo da Vinci - helicopters	**Working scientifically vocabulary** See previous years. opinion/fact, variables, independent variable, dependent variable, controlled variable, accuracy, precision, degree of trust, classification keys, scatter graphs, line graphs, causal relationships, support/refute
	• Compare friction e.g. different objects pulled or pushed by a forcemeter. • Compare water resistance e.g. plasticine in a cylinder of liquid (more viscous liquid is easier). • Compare air resistance e.g. spinners, parachutes. • Compare levers and pulleys.			

D.T.

Year 5 (Teachers should plan at least two of these each year, plus cooking and nutrition. Please note, the highlighted area in each year group must be covered. The approaches included are suggestions only and teachers are free to choose how they implement the objectives.)

Subject content	Objectives – technical knowledge	Vocabulary	Books/resources/ scientists/ technologists	Objectives - Process
Structures Kites	• **Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.** • Study a variety of simple kites. • Research information from different sources. • Set out activities for children to experiment with making things float and stay in the air. • Investigate the strengths of different materials and how & where they could be strengthened. • Design, make and evaluate a kite that can stay in the air.	• **designing** eg investigate, survey, plan, research, texture, intention, structure, outcome • **making** eg mouldable material, mould, moulding, adhesives, polyvinyl acetate (PVA) wood glue, shaping, cutting • **knowledge and understanding** eg aerobatic, afloat, airbourne, altitude, ascend, crash, descend, dip, dive, dual-line, flexible, flimsy, glide, single-line	Chinese origins Homan Walsh, Niagara suspension bridge	**Design:** • **use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups** • **generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design** **Make:** • **select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately** • **select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities** **Evaluate:** • **investigate and analyse a range of existing products** • **evaluate their ideas and products against their own design criteria and consider the views of others to improve their work** • **understand how key events and individuals in design and technology have helped shape the world** **Skills:** **focused practical tasks**
Mechanisms Moving Toys	• **Understand and use mechanical systems in their products.** Cams, axles • Investigate toys with a cam mechanism, looking at the moving part in more detail. • Try different shapes of cam and study their movement. • Learn how to set up and use: bench hook, G clamp and measure. • Mark and drill an off-centre hole in a wooden wheel. • Design, make and evaluate a toy with a moving part, using a cam for a particular purpose.	• **designing** eg sequence, annotated diagram, sketch, decision, choice, prototype, model, communicate • **making** eg shape, assemble, accurate, saw, mark out • **knowledge and understanding** eg cam, mechanism, movement, linear motion, rotary motion, pivot, off-centre, axle, force, framework, follower, guide, offset, shaft	Toys with moving parts	
Textiles Slippers	• **Select from and use a wider range of materials and components according to their functional properties and aesthetic qualities.** • Observe and dissemble a simple slipper, discuss how it has been made. • Look at the fabrics used for the different parts e.g. soles, inner and outer layers. Discuss touch and appearance and how material is fit for purpose. • Discuss with the children the suitability of the slippers for different users and their different purposes. • Show how a pattern is made and used. Demonstrate how to stitch right sides together; using tacking stitch. • Design, make and evaluate a prototype slipper and if time, a pair of slippers.	• **designing** eg specification, flow chart, mock-up, accurate, users, fabric swatches, working drawing • **making** eg pattern/template, working properties • **knowledge and understanding** eg seam, seam allowance, insulation, sole, upper, inner, reinforce, right side/wrong side, stitch, stitching, tacking, wadding, sewing machine, hem	A selection of slippers 'Grandpa's Slippers' by Joy Watson	
Cooking and nutrition Main course of an evening meal	• **Understand and apply the principles of a healthy and varied diet** • **Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques** • **Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.** • Provide children with a variety of vegetables and explain about seasonality. • Look at recipes and explain about nutritional information. • Give children chance to research different dishes. • Investigate different cooking methods and why they would be used. • Survey others to decide on popular meals. • Plan, make and evaluate a nutritious main course.	• **designing** eg evaluating, investigation, costing preferences, profile, specification, criteria, fair test, • **making** eg ingredients, quantities, shaping, mixing, topping, baking, cooking method, grilling, boiling, frying, glazing • **knowledge and understanding** eg savoury, – names of tools and equipment – sensory characteristics eg texture, doughy, crisp, chewy, crunchy, stretchy, elastic – food safety eg hygiene, bacteria, mould, decay, food poisoning	Menus and recipe books	

YEAR 5 COMPUTING

Subject content	Digital Citizenship and Online Safety	Vocabulary	Theme/period/ influential figure	NC KS2 Objectives
Online safety	• Understand the impact and impression given by your own online content/ digital footprint • Communicate respectfully, inclusively and responsibly online through awareness of different potential audiences • Know how to avoid illegal downloads and other potentially criminal online activity • Recognise different levels of risk in downloads, and the authenticity of different websites • Recognise risk levels of different devices (e.g. internet café computers/ wi-fi networks that are not secure/ your phone vs your friend's phone etc.) • Identify manipulative communication: when you are being sold to, or an individual/ group/ organisation is trying to influence you • Understand how to balance your own privacy with being open to your family • Know how to restrict your own device usage to improve sleep patterns/ mindfulness etc	Malware Security risk Digital footprint Variable	Toh Chai Keong (implemented the first wireless network for laptop computers)	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • Use sequence, selection, and repetition in programs; work with variables and various forms of input and output • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
Digital Citizenship	• Predict future uses of computing technology based on current trends and potential future problems/ needs (e.g. climate change/ increases in world population) • Understand that, when you share online content with friends/ family, you have a responsibility to ensure that the material is not 1) offensive, or 2) a potential security risk (e.g. viruses etc.)			
Digital Literacy	• Use advanced tools in word processing and presentational software e.g. line spacing. Columns, tables, text boxes, aligning text, transitions and hyperlinks that best meet the needs of that audience • In presentations, combine text, images, sound and video with effects and transitions that meet the needs of the audience and help to convey meaning (atmosphere/feelings) rather than to simply impress • Create online stories to share and then embedding into a blog/ website alongside other digital media (e.g. video/ game/ audio/ other online content) • Create podcasts/radio shows to tell stories/explain ideas/share information; Discuss their choices, audience and impact • Create films and animations using a range of software to express stories and ideas; Use more advanced techniques and effects for a more powerful effect on their audience • Adapt images to a range of target audiences by focusing on composition/ use of colouring/ text etc.			
Digital Devices	• Be able to talk about which device, if any, is the best suited to the task and be able to talk about the reasons for their selection, considering the final purpose and state of product (e.g. paper copy vs. digital copy/ how it can be transferred etc.) • Understand how to use the finder options to locate folders and files, applications and key words within text, either online or in a local document • Become familiar with typical file sizes for particular document types.			

Programming	<u>Core concepts</u> • Understand the difference between uses of 'If…then…' and 'If…then…; else…' selection statements • Understand the use of 'Repeat until' iteration statements • Understand how variables control and use data in programs; <u>Using and applying</u> • Design programs to meet specific criteria and solve problems, using a range of iteration and selection statements plus use of variables to achieve their aims • Design and evaluate programs based on audience/ purpose/ effectiveness • Create different programs to meet the same criteria/ end goal • Recognise pros and cons of different algorithms, and identifying the most efficient method for solving a problem • Continue focus on debugging • Use programming tools such as Scratch/ Espresso Coding			**Ongoing processes/skills** • Work collaboratively to share, develop and refine ideas • Be able to discuss effectiveness of work, their choices and how they could improve it