Year 4 Curriculum Overview

		Statutory Objectives
Reading	**Word reading**	• apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in English Appendix 1, both to read aloud and to understand the meaning of new words they meet • read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.
	Comprehension	• develop positive attitudes to reading and understanding of what they read by: o listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks o reading books that are structured in different ways and reading for a range of purposes o using dictionaries to check the meaning of words that they have read o increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally o identifying themes and conventions in a wide range of books o preparing poems and play scripts to read aloud and to perform, showing o understanding through intonation, tone, volume and action o discussing words and phrases that capture the reader's interest and imagination o recognising some different forms of poetry [for example, free verse, narrative poetry] • understand what they read, in books they can read independently, by: o checking that the text makes sense to them, discussing their understanding and o explaining the meaning of words in context o asking questions to improve their understanding of a text o drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence o predicting what might happen from details stated and implied o identifying main ideas drawn from more than one paragraph and summarising these o identifying how language, structure, and presentation contribute to meaning • retrieve and record information from non-fiction • participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.
Writing	**Transcription**	**Spelling (see English Appendix 1)** • use further prefixes and suffixes and understand how to add them (English Appendix 1) • spell further homophones • spell words that are often misspelt (English Appendix 1) • place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's] • use the first two or three letters of a word to check its spelling in a dictionary • write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far. **Handwriting** • use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined • ncrease the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].
	Composition	• plan their writing by: o discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar o discussing and recording ideas o draft and write by: o composing and rehearsing sentences orally (including dialogue), progressively • building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2) o organising paragraphs around a theme o in narratives, creating settings, characters and plot o in non-narrative material, using simple organisational devices [for example, headings and sub-headings] • evaluate and edit by: o assessing the effectiveness of their own and others' writing and suggesting improvements o proposing changes to grammar and vocabulary to improve consistency, o including the accurate use of pronouns in sentences • proof-read for spelling and punctuation errors • read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.
	VGP	• develop their understanding of the concepts set out in English Appendix 2 by: o extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although o using the present perfect form of verbs in contrast to the past tense o choosing nouns or pronouns appropriately for clarity and cohesion and to avoid o repetition o using conjunctions, adverbs and prepositions to express time and cause o using fronted adverbials o learning the grammar for years 3 and 4 in English Appendix 2 • indicate grammatical and other features by: o using commas after fronted adverbials o indicating possession by using the possessive apostrophe with plural nouns o using and punctuating direct speech • use and understand the grammatical terminology in English Appendix 2 accurately and appropriately when discussing their writing and reading.
Maths	**Place value**	• count in multiples of 6, 7, 9, 25 and 1000 • find 1000 more or less than a given number • count backwards through zero to include negative numbers • recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • order and compare numbers beyond 1000 • identify, represent and estimate numbers using different representations • round any number to the nearest 10, 100 or 1000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value

	Addition & subtraction	• add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • estimate and use inverse operations to check answers to a calculation • solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
	Multiplication & Division	• recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers • recognise and use factor pairs and commutativity in mental calculations • multiply two-digit and three-digit numbers by a one-digit number using formal written layout • solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
	Fractions – including decimals	• recognise and show, using diagrams, families of common equivalent fractions • count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. • solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number • add and subtract fractions with the same denominator • recognise and write decimal equivalents of any number of tenths or hundredths • recognise and write decimal equivalents to 1/4 , ½ , ¾ • find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths • round decimals with one decimal place to the nearest whole number • compare numbers with the same number of decimal places up to two decimal places • solve simple measure and money problems involving fractions and decimals to two decimal places.
	Measurement	• convert between different units of measure [for example, kilometre to metre; hour to minute] • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares • estimate, compare and calculate different measures, including money in pounds and pence • read, write and convert time between analogue and digital 12- and 24-hour clocks • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
	Properties of shape	• compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify acute and obtuse angles and compare and order angles up to two right angles by size • identify lines of symmetry in 2-D shapes presented in different orientations • complete a simple symmetric figure with respect to a specific line of symmetry. •
	Position and Direction	• describe positions on a 2-D grid as coordinates in the first quadrant • describe movements between positions as translations of a given unit to the left/right and up/down • plot specified points and draw sides to complete a given polygon. •
	Statistics	• interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
Science	Working Scientifically	• asking relevant questions and using different types of scientific enquiries to answer them • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest • improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straightforward scientific evidence to answer questions or to support their findings.
	Living Things and their Habitats	• recognise that living things can be grouped in a variety of ways • explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • recognise that environments can change and that this can sometimes pose dangers to living things
	Animals, including humas	• describe the simple functions of the basic parts of the digestive system in humans • identify the different types of teeth in humans and their simple functions • construct and interpret a variety of food chains, identifying producers, predators and prey.
	Electricity	• identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, • including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors.
	Sound	• identify how sounds are made, associating some of them with something vibrating • recognise that vibrations from sounds travel through a medium to the ear • find patterns between the pitch of a sound and features of the object that produced it • find patterns between the volume of a sound and the strength of the vibrations that produced it • recognise that sounds get fainter as the distance from the sound source increases.
	States of Matter	• compare and group materials together, according to whether they are solids, liquids or gases • observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

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<tr><td>Computing</td><td colspan="2">

design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (Scratch – Questions and Quizzes)
use sequence, selection, and repetition in programs; work with variables and various forms of input and output (Scratch – questions and quizzes)
use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (Scratch)
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 (Word processing – images, layout, tables, hyperlinks, Animation)
use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (E-safety – cyberbullying, copycats)

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<tr><td rowspan="2">History</td><td>Rolling Programme Year A</td><td>Rolling Programme Year B</td></tr>
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the Roman Empire and its impact on Britain
Britain's settlement by Anglo-Saxons and Scots
the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor

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a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 (eg The Railways, Crime and Punishment, changing power of the monarchy or World War II)
the achievements of the earliest civilizations – Ancient Egypt
a local history study

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<tr><td rowspan="2">Geography</td><td>Rolling Programme Year A</td><td>Rolling Programme Year B</td></tr>
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Locational knowledge

locate the world's countries, using maps to focus on Europe (including the location of Russia), concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zone (including day and night)

Place knowledge

understand geographical similarities and differences through the study of human and physical geography of a region in a European country

Geographical skills and fieldwork

describe and understand key aspects of:

physical geography, including: volcanoes and earthquakes, and the water cycle
human geography, focus on land use

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Locational knowledge

locate the world's countries, using maps to focus on Europe (including the location of Russia) concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time

Place knowledge

understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom

Geographical skills and fieldwork

describe and understand key aspects of:

physical geography, including: climate zones, biomes and vegetation belts
human geography, focus types of settlement

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<tr><td>British Values</td><td colspan="2">We respect the culture & beliefs of others. We treat everybody equally.
We know that we are all special. We listen to and respect other people's opinions and values.
We understand right from wrong. We understand the consequences of our actions.
We understand and respect the roles of people who may help us. We try to help other people.</td></tr>
<tr><td rowspan="2">Art and Design</td><td>Rolling Programme Year A</td><td>Rolling Programme Year B</td></tr>
<tr><td>

to create sketch books to record their observations and use them to review and revisit ideas
to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
about great artists, architects and designers in history.

Focus: Textiles – sewing and stitches

Sculpture – see CQ Essentials

Paint - using watercolours, colour mixing, brush techniques, creating moods and emotions

Drawing – see CQ Essentials

Printing – layering, environmental patterns, making printing blocks
</td><td>

to create sketch books to record their observations and use them to review and revisit ideas
to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
about great artists, architects and designers in history.

Focus: Textiles – quilting and padding

Digital media – video, images, sound

Drawing - see CQ

Collage – coiling, overlapping, tessellation, mosaic and montage
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	Rolling Programme Year A	Rolling Programme Year B
Design Technology	**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 Focus: Food, materials, construction, textiles, computing (– see CQ Essentials for skills) **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 **Technical knowledge** • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products. **Cooking and Nutrition** • 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.	**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 Focus: Food, materials, electronics, mechanics (– see CQ Essentials for skills) **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 **Technical knowledge** • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products. **Cooking and Nutrition** • 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.
Music	• 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.	
P.E.	• 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 • 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.	
R.E. (from Durham RE Approved Syllabus)	**Knowledge and Understanding of Religion** Pupils can describe some of the beliefs and features of religion. **Critical Thinking** In response to the religious material they learn about, pupils are able to express their views and support them using a plausible reason or reasons. They show some awareness of other people's views. **Personal Reflection** In relation to religious material studied, pupils are able to reflect on their own feelings, ideas and values and appreciate that not all people think, feel and believe the same. **Breadth of Study** • Christianity • Hinduism or Sikhism • **One** religion at discretion of schools: – Buddhism – Islam – Judaism	
MFL	• listen attentively to spoken language and show understanding by joining in and responding • explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words • 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 • present ideas and information orally to a range of audiences • read carefully and show understanding of words, phrases and simple writing • appreciate stories, songs, poems and rhymes in the language • broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using 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 • understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English	
P.S.H.C.E.	1 Developing confidence and responsibility and making the most of their abilities. 2 Preparing to take an active role as citizens. 3 Developing a healthy and safer lifestyle. 4 Developing good relationships and respecting differences between people	

SEAL	New Beginnings	Getting On and Falling Out (plus anti-bullying week)	Going for Goals	Good to be Me	Relationships	Changes