



Year 5 Curriculum

English Objectives

English Objectives			
SPEAKING AND LISTENING	A	Sp	Su
SL1: listen and respond appropriately to adults and their peers			
SL2: ask relevant questions to extend their understanding and knowledge			
SL3: use relevant strategies to build their vocabulary			
SL4: articulate and justify answers, arguments and opinions			
SL5: give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings			
SL6: maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments			
SL7: use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas			
SL8: speak audibly and fluently with an increasing command of Standard English			
SL9: participate in discussions, presentations, performances, role-play, improvisations and debates			
SL10: gain, maintain and monitor the interest of the listener(s)			
SL11: consider and evaluate different viewpoints, attending to and building on the contributions of others			
SL12: select and use appropriate registers for effective communication			
READING			
WR1: 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			
RC1: maintain positive attitudes to reading and understanding of what they read by:			
RC1.1: continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks			
RC1.2: reading books that are structured in different ways and reading for a range of purposes			
RC1.3: increasing 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			
RC1.4: recommending books that they have read to their peers, giving reasons for their choices			
RC1.5: identifying and discussing themes and conventions in and across a wide range of writing			
RC1.6: making comparisons within and across books			
RC1.7: learning a wider range of poetry by heart			
RC1.8: preparing 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			
RC2: understand what they read by:			
RC2.1: checking that the book makes sense to them, discussing their understanding and exploring the meaning of words			
RC2.2: asking questions to improve their understanding			
RC 2.3: drawing inferences such as inferring characters' feelings, thoughts and motives from their actions and justifying inferences with evidence			
RC2.4: predicting what might happen from details stated and implied			
RC2.5: summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas			
RC2.6: identifying how language, structure and presentation contribute to meaning			
RC3: discuss and evaluate how authors use language, including figurative language, considering the impact on the reader			
RC4: distinguish between statements of fact and opinion			
RC5: retrieve, record and present information from non-fiction			
RC6: participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously			
RC7: explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary			
RC8: provide reasoned justifications for their views			
SPELLING			
WTS1: use further prefixes and suffixes and understand the guidelines for adding them			
WTS2: spell some words with 'silent' letters, e.g. knight, psalm, solemn			
WTS3: continue to distinguish between homophones and other words which are often confused			
WTS4: 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			
WTS5: use dictionaries to check the spelling and meaning of words			
WTS6: use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary			
WTS7: use a thesaurus			

COMPOSITION			
WC1: <i>plan their writing by:</i>			
WC1.1: identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own			
WC1.2: noting and developing initial ideas, drawing on reading and research where necessary			
WC1.3: in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed			
WC2: <i>draft and write by:</i>			
WC2.1: selecting appropriate vocabulary and grammar, understanding how such choices can change and enhance meaning			
WC2.2: in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action			
WC3: <i>evaluate and edit by:</i>			
WC3.1: assessing the effectiveness of their own and others' writing			
WC3.2: proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning			
WC3.3: ensuring the consistent and correct use of tense throughout a piece of writing			
WC3.4: ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register			
WC4: proof-read for spelling and punctuation errors			
WC5: perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear			
VOCABULARY, GRAMMAR AND PUNCTUATION			
WVGP1: develop their understanding of the concepts set out in English Appendix 2 by:			
WVGP1.1: Recognising vocabulary and structures that are appropriate for formal speech and writing, including the subjunctive form			
WVGP1.4: using expanded noun phrases to convey complicated information concisely			
WVGP1.5: using modal verbs or adverbs to indicate degrees of possibility			
WVGP1.6: using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative			
WVGP2: <i>indicate grammatical and other features by:</i>			
WVGP2.1: using commas to clarify meaning or avoid ambiguity in writing			
WVGP2.3: using brackets, dashes or commas to indicate parenthesis			
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HANDWRITING AND PRESENTATION			
WHP1: write legibly, fluently and with increasing speed by:			
WHP1.1: choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters			
WHP1.2: choosing the writing implement that is best suited for a task			

Maths Objectives

PLACE VALUE			
Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.			
Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.			
Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.			
Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000			
Solve number problems and practical problems that involve all of the above.			
Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.			
ADDITION AND SUBTRACTION			
Add and subtract numbers mentally with increasingly large numbers.			
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.			
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.			
STATISTICS			
Solve comparison, sum and difference problems using information presented in a line graph.			
Complete, read and interpret information in tables including timetables.			
MULTIPLICATION AND DIVISION			
Multiply and divide numbers mentally drawing upon known facts.			
Multiply and divide whole numbers by 10, 100 and 1000.			
Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.			
Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3)			
Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.			
Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.			
Establish whether a number up to 100 is prime and recall prime numbers up to 19			
Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers.			
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.			
Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.			
PERIMETER AND AREA			
Measure and calculate the perimeter of composite rectilinear shapes in cm and m.			
Calculate and compare the area of rectangles (including squares), and including using standard units, cm ² , m ² estimate the area of irregular shapes.			
FRACTIONS			
Compare and order fractions whose denominators are multiples of the same number.			
Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.			
Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number			
Add and subtract fractions with the same denominator and denominators that are multiples of the same number.			
Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.			
Read and write decimal numbers as fractions			
Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.			
DECIMALS AND PERCENTAGES			
Read, write, order and compare numbers with up to three decimal places.			
Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.			
Round decimals with two decimal places to the nearest whole number and to one decimal place.			
Solve problems involving number up to three decimal places.			
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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.			
Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000			
Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.			
PROPERTIES OF SHAPE			
Identify 3D shapes, including cubes and other cuboids, from 2D 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.			
Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.			
Draw given angles, and measure them in degrees (°)			
Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90°			
POSITION AND DIRECTION			
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.			
CONVERTING UNITS OF MEASURE			
Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml]			
Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.			
Solve problems involving converting between units of time.			
VOLUME			
Estimate volume [for example using 1cm ³ blocks to build cuboids (including cubes)] and capacity [for example, using water]			
Use all four operations to solve problems involving measure.			

Science Objectives

WORKING SCIENTIFICALLY			
1: planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary			
2: taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate			
3: recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs			
4: using test results to make predictions to set up further comparative and fair tests			
5: 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			
6: identifying scientific evidence that has been used to support or refute ideas or arguments			
EARTH AND SPACE			
1: describe the movement of the Earth and other planets relative to the Sun in the solar system			
2: describe the movement of the Moon relative to the Earth			
3: describe the Sun, Earth and Moon as approximately spherical bodies			
4: use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky			
FORCES			
1: explain that unsupported objects fall towards the Earth because of the force of gravity acting between the earth and the falling object			
2: identify the effects of air resistance, water resistance and friction, that act between moving surfaces			
3: recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect			
PROPERTIES AND CHANGES OF EVERYDAY MATERIALS			
1: 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			
2: know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution			
3: use knowledge of solids, liquids and gases to decide how mixtures might be separated, including filtering, sieving and evaporating			
4: gives reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic			
5: demonstrate that dissolving, mixing and changes of state are reversible changes			
6: 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			
LIVING THINGS AND THEIR HABITATS			
1: describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird			
2: describe the life processes of reproduction in some plants and animals			
ANIMALS, INCLUDING HUMANS			
1: describe the changes as humans develop to old age			

Computing Objectives

1: design and write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts			
2: use sequence, selection, and repetition in programs; work with variables and various forms of input and output			
3: use logical reasoning to explain how some simple algorithm works and to detect and correct errors in algorithms and programs			
4: 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			
5: use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content			
6: 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			
7: use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact			

History Objectives

6: a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066			
8: Ancient Greece – a study of Greek life and achievements and their influence on the western world			
9: a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300			

Geography Objectives

LOCATION KNOWLEDGE			
1: locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America and concentrating on their environmental regions, key physical and human characteristics, countries and major cities			
3: 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 zones (including day and night)			
PLACE KNOWLEDGE			
4: understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America			
HUMAN AND PHYSICAL GEOGRAPHY			
5: describe and understand key aspects of:			
5.1: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle			
5.2: human geography, including: types of settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water			
GEOGRAPHICAL SKILLS AND FIELDWORK			
6: use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied			
7: use the eight points compass, four and six-figure grid reference, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world			
8: use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies			

Art and Design Objectives

1: to create sketch books to record their observations and use them to review and revisit ideas			
2: to improve their mastery of art and design techniques, such as drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay)			
3: about the greatest artists, architects and designers in history			

Design and Technology Objectives

DESIGN			
1: 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			
2: generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design			
MAKE			
3: select from and use a wider range of tools and equipment to perform practical tasks, (for example, cutting, shaping, joining and finishing) accurately			
4: 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:			
5: investigate and analyse a range of existing products			
6: evaluate their ideas and products against their own design criteria and consider the views of others to improve their work			
7: understand how key events and individuals in design and technology have shaped the world			
TECHNICAL KNOWLEDGE			
8: apply their understanding of how to strengthen, stiffen and reinforce more complex structures			
9: understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages)			
11: apply their understanding of computing to programme, monitor and control their products			
COOKING AND NUTRITION			
12: understand and apply the principles of a healthy and varied diet			
13: prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques			
14: understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed			

Music Objectives

1: play and perform in solo and ensemble contexts, using their voice and playing musical instruments with increasing accuracy, control and expression			
2: listen with attention to detail and recall sounds with increasing aural memory			
3: use and understand staff and other musical notations			
4: use and understand staff and other musical notations			
5: appreciate and understand a wide range of high-quality live and recorded music from drawn different traditions and from great musicians and composers			
6: develop an understanding of the history of music			

Languages Objectives

1: listen attentively to spoken language and show understanding by joining in and responding			
2: explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words			
3: engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help*			
4: speak in sentences, using familiar vocabulary, phrases and basic language structure			
5: develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases*			
6: present ideas and information orally to a range of audiences*			
7: read carefully and show understanding of words, phrases and simple writing			
8: appreciate stories, songs, poems and rhymes in the language			
9: broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary			
10: write phrases from memory, and adapt these to create new sentences, to express ideas clearly			
11: describe people, places, things and actions orally* and in writing			
12: 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.			