



The Raleigh Curriculum Overview Year 5



English

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Art & Design

- Use sketchbooks to collect, record, review, revisit and evaluate ideas
- Improve mastery of techniques such as drawing, painting and sculpture with varied materials e.g. clay figureheads & scarab beetles
- Learn about great artists, architects & designers such as the landscape artist John Miller

Geography

- Develop map skills and grid referencing.
- Understand the impact of physical features on places and environments eg the River Nile
- Understand how human activity affects the environment eg Dorset Coast.
- Understand latitude, longitude, Equator, hemispheres, tropics, polar circles & time zones
- Use fieldwork to record & explain areas e.g on our residential trip to Osmington Bay.

Physical Education

- Use running, jumping, catching and throwing in isolation and in combination
- Play competitive games, modified as appropriate
- Develop flexibility & control in gym, dance & athletics
- Compose sequences in Dance and Gym
- Evaluate performances to improve personal achievements.

Mathematics

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Design & Technology

- Use research & criteria to develop products which are fit for purpose and aimed at specific groups e.g. bread packaging
- Use annotated sketches, cross-section diagrams & computer-aided design e.g. building an Egyptian wooden pyramid
- Analyse & evaluate existing products and improve own work
- Use mechanical & electrical systems in own products, including programming
- Cook savoury dishes for a healthy & varied diet such as hummus

History

British History
Anglo-Saxons & Vikings, Invasions, settlements & kingdoms
Viking invasions during a wow day
Alfred the Great
Edward the Confessor
Broader History Study
Ancient and modern Egypt e.g
A study of Egyptian life and achievements and their influence on the world
Viking and Egyptian wow days bring learning to life.

Computing

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems eg coding on Purple Mash.
- Use technology safely, respectfully and responsibly eg on the Internet
- Collect, analyse, evaluate and present data and information eg spreadsheets in Excel
- Select, use and combine a variety of digital software (including internet services) on a range of digital devices to accomplish given goals (Moviemaker for advert to persuade people to go to PGL)

Modern Languages

- Listen, & engage through speaking, reading and writing in French.
- Engage in conversations, expressing opinions
- Speak in simple language & be understood
- Develop appropriate pronunciation
- Present ideas & information orally
- Show understanding in simple reading
- Express opinions
- Adapt known language to create new ideas
- Describe people, places & things
- Understand basic grammar, e.g. gender

Music

- Perform with control and expression – solo and ensemble work.
- Use various aspects of music in compositions – dynamics, pitch, harmony
- Listen to music in detail and recall aurally
- Develop an understanding of the history of music, including famous pieces, musicians and composers.

Religious Education

Following the agreed local syllabus.
Key religions are Islam and Christianity

- Understand the key elements of Islam eg trip to Mosque
- Investigate different views of God.
- Develop an understanding of key Christian festivals eg Harvest, Christmas and Easter including faith through Art,
- Look at the deeper meaning of Christian symbols eg the Christingle

Science

Biology
Living things and their habitats
differences in the life cycles of a mammal, an amphibian, an insect and a bird
life process of reproduction in some plants and animals.

Animals, including humans
describe the changes as humans develop to old age.

Chemistry
Properties and changes of materials
classify materials on the basis of their properties, give reasons for the particular uses of everyday materials, including metals, wood and plastic
understand mixtures and solutions
know about reversible and irreversible changes

Physics
Earth and Space
understand location and interaction of Sun, Earth and Moon
use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Forces
introduce gravity
resistance (air/water resistance)
Mechanical forces e.g., pulley, levers

PSHE

-Know how emotions and bodies change as they approach puberty and how to deal with their feelings towards themselves, their families and other in a positive way.
--Recognise the consequences of bullying
-Appreciate the range of national, religious and ethnic identities in the UK
Understand the importance of their choices in regards to healthy living.



Curriculum overview for Year 5

Mathematics

Number & PV

read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
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 whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
Add and subtract numbers mentally with increasingly large numbers
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.

Multiplication & Division

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
Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Fractions (including decimals & Percentages)

compare and order fractions whose denominators are all 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 [for example, $52 + 54 = 56 = 151$]
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 [for example, $0.71 = 10071$] 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
Read, write, order and compare numbers with up to three decimal places
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 21, 41, 51, 52, 54 and those fractions with a denominator of a multiple of 10 or 25.

Measure

convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
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
Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water]
Solve problems involving converting between units of time
use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

Geometry: properties of Shape

identify 3-D shapes, including cubes and other cuboids, from 2-D representations 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 21 a turn (total 180o) other multiples of 90o
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

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.

Statistics

solve comparison, sum and difference problems using information presented in a line graph
complete, read and interpret information in tables, including timetables.



Curriculum overview for Year 5

English

Reading

Word Reading

Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in the National Curriculum Appendix, both to read aloud and to understand the meaning of new words that they meet.

Comprehension

Maintain positive attitudes to reading and understanding of what they read by:

- continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- reading books that are structured in different ways and reading for a range of purposes
- 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
- recommending books that they have read to their peers, giving reasons for their choices
- identifying and discussing themes and conventions in and across a wide range of writing
- making comparisons within and across books
- learning a wider range of poetry by heart
- 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

Understand what they read by:

- checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
- asking questions to improve their understanding
- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- predicting what might happen from details stated and implied
- summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
- identifying how language, structure and presentation contribute to meaning

Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader

Distinguish between statements of fact and opinion

Retrieve, record and present information from non-fiction

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

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

Provide reasoned justifications for their views.

Writing

Transcription

Spell:

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

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.

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
- precisising 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

Develop their understanding of the concepts set out in NC English Appendix 2 pg 78 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 year 5 in NC English Appendix 2 pg 78

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 NC English Appendix 2 pg 78 accurately and appropriately in discussing their writing and reading.