



The Raleigh Curriculum Overview Year 4



English

SEE ATTACHED SHEET

Mathematics

SEE ATTACHED SHEET

Science

Biology
Living things and their habitats
 classify living things
 use classification keys to help group, identify and name living things
 recognise that environments can change and that this can sometimes pose dangers to living things.

Animals, including humans
 describe the simple functions of the basic parts of the digestive system in humans
 identify the different types of teeth in humans and their functions
 food chains, identifying producers, predators and prey.

Chemistry
States of Matter
 solids, liquids or gases
 observe that some materials change state when they are heated or cooled
 evaporation and condensation and the water cycle

Physics
Sound
 sounds as vibrations
 recognise that vibrations from sounds travel through a medium to the ear
 explore pitch, volume, distance

Electricity
 construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
 simple series circuit
 switches
 recognise some common conductors and insulators

Art & Design

- Use sketchbooks to collect, record and evaluate ideas
- Improve mastery of techniques such as drawing, painting and sculpture with varied materials
- Learn about great artists, architects & designers including Sir John Tenniel

Design & Technology

- Use research & criteria to develop products which are fit for purpose
- Use annotated sketches and prototypes to explain ideas
- Evaluate existing products and improve own work
- Use mechanical systems in own work
- Understand seasonality; prepare & cook mainly savoury dishes e.g. vegetable soup

Modern Languages

- Listen & engage to a balance of written and spoken vocabulary - French
- Ask & answer questions
- Speak in sentences using familiar vocabulary
- Ask questions
- Develop appropriate pronunciation
- Show understanding of words & phrases
- Use description
- Appreciate stories, songs, poems & rhymes
- Broaden vocabulary

PSHE

- Grow in resilience by reflecting on achievements + mistakes, making responsible choices and creating personal goals.
- Identify rules and know why they are needed in different situations (school / nationally)
- Know how to stay healthy and safe, including exercise, diet, drugs, acceptable physical contact, road use, E-safety and understanding what affects mental health.
- Realise the nature and consequences of racism, teasing and bullying

Geography

- Locate world's countries, focussing on Europe & Americas focus on key physical & human features
- Study a region of the UK (not local area)
- Use 8 points of compass, symbols & keys
- Describe & understand climate, settlements, trade links, etc.
- Use fieldwork to observe, measure & record

History

- British History (taught chronologically)
- Roman Empire & impact on Britain:
 - Julius Caesar's attempted invasion
 - Roman Empire & successful invasion
 - British resistance, e.g. Boudicca
 - Romanisation of Britain
- Broader History Study
 Local history - Guildford

Music

- Use voice and instruments with more accuracy and expression
- Be able to control the sounds they make
- Improvise and begin to compose music for different settings or emotions
- Listen with attention to detail – be able to identify common instruments
- Appreciate wide range of live and recorded music
- Begin to know the history of some famous pieces and / or composers.

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
- Compare performances to achieve personal bests
- Swimming proficiency at 25m

Computing

Control/movement/Sound
 Design and write simple programs that accomplish specific goals, including controlling or simulating physical systems.
 Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.
 Design and write simple 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.
 Generate appropriate inputs and predicted outputs to test programs.

Powerpoint, Excel-spread sheet, word typing skills, e-safety, ipad apps, taking pictures, making videos, research and databases need to be taught through other subjects

Religious Education

- Following the agreed local syllabus studying:
- Christian prayer and worship
 - Artistic representations of Christmas
 - Sikhism
 - Special clothes
 - Christian preparation for Easter
 - Christian Milestones
 - Faith in local communities



Curriculum overview for Year 4

Mathematics

Number & PV

Count in multiples of 6, 7, 9, 25, 1000

Find 1000 more/less than any given number and order and compare numbers beyond 1000

Recognise place value of 4 digit numbers ThHTU

Round any number to the nearest 10, 100, or 1000

Solve number and practical problems involving all of the above with increasing large positive numbers

Read Roman numerals to and know that over time the numeral system changed to include 0 and place value

Count back through 0 including negative numbers

Addition and Subtraction

Add and subtract 4 digit numbers using formal methods (column addition and subtraction)

Estimate and use inverse operation to check answers

Solve addition and subtraction two step problems, deciding which method to use and give reasons for choices

Multiplication & Division

Recall multiplication and division facts for all tables up to 12 x 12

use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers; recognise and use factor pairs and commutativity in mental calculations

multiply two-digit and three-digit numbers by a one-digit number using formal written layout; solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

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 41, 21, 43

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.

Measure

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

Geometry: properties of Shape

Draw 2D and make 3D models of shapes, including in different orientation

Recognise angles as a property of shape, identify that two right angles = half turn, 3 = $\frac{3}{4}$ turn, 4 = whole turn

Identify pairs of perpendicular and parallel lines horizontally and vertically

Geometry: 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.



Curriculum overview for Year 4

English

Reading

Word Reading

Apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in the National Curriculum Appendix, 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:

- listening to and discussing a 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
- using dictionaries to check the meaning of words that they have read
- increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
- identifying themes and conventions in a wide range of books
- preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
- discussing words and phrases that capture the reader's interest and imagination
- recognising some different forms of poetry [for example, free verse, narrative poetry]

Understand what they read, in books they can read independently, by:

- checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
- asking questions to improve their understanding of a text
- 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
- identifying main ideas drawn from more than one paragraph and summarising these
- 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

Spell:

Use further prefixes and suffixes and understand how to add them

Spell further homophones

Spell words that are often misspelt

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

Increase 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:

- discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
- discussing and recording ideas

Draft and write by:

- composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (NC English Appendix 2 pg 77)
- organising paragraphs around a theme
- in narratives, creating settings, characters and plot
- in non-narrative material, using simple organisational devices [for example, headings and sub-headings]

Evaluate and edit by:

- assessing the effectiveness of their own and others' writing and suggesting improvements
- proposing changes to grammar and vocabulary to improve consistency, 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.

Vocabulary, grammar and punctuation

Develop their understanding of the concepts set out in NC English Appendix 2 pg 77 by:

- extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although
- using the present perfect form of verbs in contrast to the past tense
- choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition
- using conjunctions, adverbs and prepositions to express time and cause
- using fronted adverbials
- learning the grammar for year 4 in NC English Appendix 2 pg 77

Indicate grammatical and other features by:

- using commas after fronted adverbials
- indicating possession by using the possessive apostrophe with plural nouns
- using and punctuating direct speech

Use and understand the grammatical terminology in NC English Appendix 2 pg 77 accurately and appropriately when discussing their writing and reading.