

New National Curriculum

English

Lower Key Stage 2

Spoken Language (Years 1 to 6)

- 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.

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.

Reading: 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

- use further prefixes and suffixes and understand how to add them (English Appendix 1)
- spell further homophones
- spell words that are often miss-spelt (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.

Writing: 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 down-strokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch).

Writing: 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 & write by:

- composing and rehearsing sentences orally (including dialogue), progressively building a

Math

Number: Number & 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
- recognise the place value of each digit in a four- and ones)
- order and compare numbers beyond 1000
- identify, represent and estimate numbers using di
- round any number to the nearest 10, 100 or 1000
- solve number and practical problems that involve a positive numbers
- read Roman numerals to 100 (I to C) and know the to include the concept of zero and place value.

Number: Addition & Subtraction

- add and subtract numbers with up to 4 digits using addition and subtraction where appropriate
- estimate and use inverse operations to check answers
- solve addition and subtraction two-step problems methods to use and why.

Number: Multiplication & Division

- recall multiplication and division facts for multiplication
- use place value, known and derived facts to multiply by 0 and 1; dividing by 1; multiplying together three
- recognise and use factor pairs and commutativity
- multiply two-digit and three-digit numbers by a one
- solve problems involving multiplying and adding multiply two digit numbers by one digit, integer scale problems such as n objects are connected to m objects

Number: Fractions

- recognise and show, using diagrams, families of common
- count up and down in hundredths; recognise that by one hundred and dividing tenths by ten.
- solve problems involving increasingly harder fractions divide quantities, including non-unit fractions where
- add and subtract fractions with the same denominator
- recognise and write decimal equivalents of any number
- recognise and write decimal equivalents to 1/4, 1/2
- find the effect of dividing a one- or two-digit number the digits in the answer as ones, tenths and hundred
- round decimals with one decimal place to the nearest
- compare numbers with the same number of decimal
- solve simple measure and money problems involving places.

Measurement

- convert between different units of measure (for example, measure and calculate the perimeter of a rectangle and metres
- find the area of rectilinear shapes by counting square
- estimate, compare and calculate different measures

Geometry: Properties of Shapes

- compare and classify geometric shapes, including their properties and sizes
- identify acute and obtuse angles and compare arc size
- identify lines of symmetry in 2-D shapes presented
- complete a simple symmetric figure with respect

Geometry: Position & Direction

- describe positions on a 2-D grid as coordinates in
- describe movements between positions as translations up/down
- plot specified points and draw sides to complete a

Statistics

- interpret and present discrete and continuous data including bar charts and time graphs.
- solve comparison, sum and difference problems using pictograms, tables and other graphs.
- complete a simple symmetric figure with respect

Geometry: Position & Direction

- describe positions on a 2-D grid as coordinates in
- describe movements between positions as translations up/down

Curriculum 2014: Year 4

Maths

10
number
of negative numbers
place in a four-digit number (thousands, hundreds, tens,

1000
numbers using different representations
100 or 1000
that involve all of the above and with increasingly large

and know that over time, the numeral system changed
in value.

4 digits using the formal written methods of columnar
arithmetic
to check answers to a calculation
problems in contexts, deciding which operations and

for multiplication tables up to 12
facts to multiply and divide mentally, including: multiplying
together three numbers
commutativity in mental calculations
numbers by a one-digit number using formal written layout
and adding, including using the distributive law to
simplify, integer scaling problems and harder correspondence
problems between objects.

families of common equivalent fractions
recognise that hundredths arise when dividing an object
into ten.
order fractions to calculate quantities, and fractions to
problems where the answer is a whole number
same denominator
tenths of any number of tenths or hundredths
fractions to 1/4, 1/2, 3/4
two-digit number by 10 and 100, identifying the value of
tenths and hundredths
round to the nearest whole number
number of decimal places up to two decimal places
problems involving fractions and decimals to two decimal

measure [for example, kilometre to metre; hour to minute]
area of a rectilinear figure (including squares) in centimetres

counting squares
different measures, including money in pounds and pence.

angles, including quadrilaterals and triangles, based on

compare and order angles up to two right angles by

as presented in different orientations
with respect to a specific line of symmetry.

ordinates in the first quadrant
lines as translations of a given unit to the left/right and
to complete a given polygon.

continuous data using appropriate graphical methods,

problems using information presented in bar charts,

with respect to a specific line of symmetry.

ordinates in the first quadrant
lines as translations of a given unit to the left/right and

Science

Working Scientifically (Lower Key Stage 2)

- 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 & 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 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 simple functions
- construct and interpret a variety of food chains, identifying producers, predators and prey.

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.

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.

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.

History

Key Stage 2

Pupils should 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. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources.

- changes in Britain from the Stone Age to the Iron Age
- 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
- a local history study

- learn from its structure, vocabulary and grammar
- discussing and recording ideas

Draft & write by:

- composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2)
- 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 & 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.

Writing: Vocabulary, Grammar & Punctuation

Develop their understanding of the concepts set out in English Appendix 2 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 years 3 and 4 in English Appendix 2

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 English Appendix 2 accurately and appropriately when discussing their writing and reading.

Languages

Key Stage 2

- 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.

The starred (*) content will not be applicable to ancient languages.

Physical Education

Key Stage 2

- 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.

Swimming & Water Safety

All schools must provide swimming instruction either in KS1 or KS2.

- swim competently, confidently and proficiently over a distance of at least 25 metres
- use a range of strokes effectively [for example, front crawl, backstroke and breaststroke]
- perform safe self-rescue in different water-based situations.

Geometry: Position & Direction

- describe positions on a 2-D grid as coordinates in
- describe movements between positions as translation up/down
- plot specified points and draw sides to complete

Statistics

- interpret and present discrete and continuous data including bar charts and time graphs.
- solve comparison, sum and difference problems using pictograms, tables and other graphs.

Design & Technology

Key Stage 2

Design

- use research and develop design criteria to inform appealing products that are fit for purpose, aimed at particular audiences
- generate, develop, model and communicate their ideas using sketches, cross-sectional and exploded diagrams, computer-aided design

Make

- select from and use a wider range of tools and equipment [for example, cutting, shaping, joining and finishing], according to their purpose
- select from and use a wider range of materials and components, materials, textiles and ingredients, according to their qualities

Evaluate

- investigate and analyse a range of existing products against their own design criteria and consider the reasons for success or failure
- understand how key events and individuals in design history have influenced the world

Technical Knowledge

- apply their understanding of how to strengthen, secure and assemble structures
- understand and use mechanical systems in their products [for example, cams, levers and linkages]
- understand and use electrical systems in their products incorporating switches, bulbs, buzzers and motors
- apply their understanding of computing to program simple systems

Cooking & Nutrition

- understand and apply the principles of a healthy and balanced diet
- prepare and cook a variety of predominantly savoury dishes using a range of techniques
- understand seasonality, and know where and how food is sourced, reared, caught and processed.

Computing

Key Stage 2

- design, write and debug programs that accomplish specific tasks, such as simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programming
- 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, services, such as the world wide web; and the implications of data collection and collaboration
- use search technologies effectively, appreciate how results can vary and discerning in evaluating digital content
- select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and digital content to accomplish given goals, including collecting, analysing and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns

ordinates in the first quadrant
ns as translations of a given unit to the left /right and
o complete a given polygon.

continuous data using appropriate graphical methods,
problems using information presented in bar charts,

Technology

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pose, aimed at particular individuals or groups
nicate their ideas through discussion, annotated
d diagrams, prototypes, pattern pieces and

tools and equipment to perform practical tasks [for
finishing], accurately
materials and components, including construction
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sting products evaluate their ideas and products
consider the views of others to improve their work
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s and motors]
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Computing

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of software (including internet services) on a range
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and responsibly; recognise acceptable/unacceptable
report concerns about content and contact.

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
- a local history study
- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
- the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China
- Ancient Greece – a study of Greek life and achievements and their influence on the western world
- 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.

Art & Design

Key Stage 2

- 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.

Geography

Key Stage 2

Locational Knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, 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
- 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

- 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 & Physical Geography

Describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical Skills & Fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Music

Key Stage 2

- 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.