Year 4 National Curriculum

CHASE BRIDGE PRIMARY SCHOOL

Year 4 National Curriculum

Contents

English

Purpose of study

English has a pre-eminent place in education and in society. A high-quality education in English will teach pupils to speak and write fluently so that they can communicate their ideas and emotions to others and through their reading and listening, others can communicate with them. Through reading in particular, pupils have a chance to develop culturally, emotionally, intellectually, socially and spiritually. Literature, especially, plays a key role in such development. Reading also enables pupils both to acquire knowledge and to build on what they already know. All the skills of language are essential to participating fully as a member of society; pupils, therefore, who do not learn to speak, read and write fluently and confidently are effectively disenfranchised.

Aims

The overarching aim for English in the national curriculum is to promote high standards of language and literacy by equipping pupils with a strong command of the spoken and written word, and to develop their love of literature through widespread reading for enjoyment. The national curriculum for English aims to ensure that all pupils:

- read easily, fluently and with good understanding
- develop the habit of reading widely and often, for both pleasure and information
- acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language
- appreciate our rich and varied literary heritage
- write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences
- use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas
- are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.

Spoken language

The national curriculum for English reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. Spoken language underpins the development of reading and writing. The quality and variety of language that pupils hear and speak are vital for developing their vocabulary and grammar and their understanding for reading and writing. Teachers should therefore ensure the continual development of pupils' confidence and competence in spoken language and listening skills. Pupils should develop a capacity

to explain their understanding of books and other reading, and to prepare their ideas before they write. They must be assisted in making their thinking clear to themselves as well as to others and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions. Pupils should also be taught to understand and use the conventions for discussion and debate.

All pupils should be enabled to participate in and gain knowledge, skills and understanding associated with the artistic practice of drama. Pupils should be able to adopt, create and sustain a range of roles, responding appropriately to others in role. They should have opportunities to improvise, devise and script drama for one another and a range of audiences, as well as to rehearse, refine, share and respond thoughtfully to drama and theatre performances.

Statutory requirements which underpin all aspects of spoken language across the six years of primary education form part of the national curriculum. These are reflected and contextualised within the reading and writing domains which follow.

Reading

The programmes of study for reading at key stages 1 and 2 consist of two dimensions:

- word reading
- comprehension (both listening and reading).

It is essential that teaching focuses on developing pupils' competence in both dimensions; different kinds of teaching are needed for each.

Skilled word reading involves both the speedy working out of the pronunciation of unfamiliar printed words (decoding) and the speedy recognition of familiar printed words. Underpinning both is the understanding that the letters on the page represent the sounds in spoken words. This is why phonics should be emphasised in the early teaching of reading to beginners (i.e. unskilled readers) when they start school.

Good comprehension draws from linguistic knowledge (in particular of vocabulary and grammar) and on knowledge of the world. Comprehension skills develop through pupils' experience of high-quality discussion with the teacher, as well as from reading and discussing a range of stories, poems and non-fiction. All pupils must be encouraged to read widely across both fiction and non-fiction to develop their knowledge of themselves and the world in which they live, to establish an appreciation and love of reading, and to gain knowledge across the curriculum. Reading widely and often increases pupils' vocabulary because they encounter words they would rarely hear or use in everyday speech. Reading also feeds pupils' imagination and opens up a treasure-house of wonder and joy for curious young minds.

It is essential that, by the end of their primary education, all pupils are able to read fluently, and with confidence, in any subject in their forthcoming secondary education.

Writing

The programmes of study for writing at key stages 1 and 2 are constructed similarly to those for reading:

- transcription (spelling and handwriting)
- composition (articulating ideas and structuring them in speech and writing).

It is essential that teaching develops pupils' competence in these two dimensions. In addition, pupils should be taught how to plan, revise and evaluate their writing. These aspects of writing have been incorporated into the programmes of study for composition.

Writing down ideas fluently depends on effective transcription: that is, on spelling quickly and accurately through knowing the relationship between sounds and letters (phonics) and understanding the morphology (word structure) and orthography (spelling structure) of words. Effective composition involves forming, articulating and communicating ideas, and then organising them coherently for a reader. This requires clarity, awareness of the audience, purpose and context, and an increasingly wide knowledge of vocabulary and grammar. Writing also depends on fluent, legible and, eventually, speedy handwriting.

Spelling, vocabulary, grammar, punctuation and glossary

The two statutory appendices – on spelling and on vocabulary, grammar and punctuation – give an overview of the specific features that should be included in teaching the programmes of study.

Opportunities for teachers to enhance pupils' vocabulary arise naturally from their reading and writing. As vocabulary increases, teachers should show pupils how to understand the relationships between words, how to understand nuances in meaning, and how to develop their understanding of, and ability to use, figurative language. They should also teach pupils how to work out and clarify the meanings of unknown words and words with more than one meaning. References to developing pupils' vocabulary are also included within the appendices.

Pupils should be taught to control their speaking and writing consciously and to use Standard English. They should be taught to use the elements of spelling, grammar, punctuation and 'language about language' listed. This is not intended to constrain or restrict teachers' creativity, but simply to provide the structure on which they can construct exciting lessons. A non-statutory Glossary is provided for teachers.

Throughout the programmes of study, teachers should teach pupils the vocabulary they need to discuss their reading, writing and spoken language. It is important that pupils learn the correct grammatical terms in English and that these terms are integrated within teaching.

School curriculum

The programmes of study for English are set out year-by-year for key stage 1 and two-yearly for key stage 2. The single year blocks at key stage 1 reflect the rapid pace of development in word reading during these two years. Schools are, however, only required to teach the relevant

programme of study by the end of the key stage. Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study. In addition, schools can introduce key stage content during an earlier key stage if appropriate. All schools are also required to set out their school curriculum for English on a year-by-year basis and make this information available online.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets] or the content indicated as being 'non-statutory'.

Spoken language – years 1 to 6

Spoken language

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

These statements apply to all years. The content should be taught at a level appropriate to the age of the pupils. Pupils should build on the oral language skills that have been taught in preceding years.

Pupils should be taught to develop their competence in spoken language and listening to enhance the effectiveness with which they are able to communicate across a range of contexts and to a range of audiences. They should therefore have opportunities to work in groups of different sizes – in pairs, small groups, large groups and as a whole class. Pupils should understand how to take turns and when and how to participate constructively in conversations and debates.

Attention should also be paid to increasing pupils' vocabulary, ranging from describing their

Notes and guidance (non-statutory)

immediate world and feelings to developing a broader, deeper and richer vocabulary to discuss abstract concepts and a wider range of topics, and to enhancing their knowledge about language as a whole.

Pupils should receive constructive feedback on their spoken language and listening, not only to improve their knowledge and skills but also to establish secure foundations for effective spoken language in their studies at primary school, helping them to achieve in secondary education and beyond.

Years 3 and 4 programme of study

Reading – word reading

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

At this stage, teaching comprehension should be taking precedence over teaching word reading directly. Any focus on word reading should support the development of vocabulary.

When pupils are taught to read longer words, they should be supported to test out different pronunciations. They will attempt to match what they decode to words they may have already heard but may not have seen in print [for example, in reading 'technical', the pronunciation /tɛtʃnɪkəl/ ('tetchnical') might not sound familiar, but /tɛknɪkəl/ ('teknical') should].

Reading – comprehension

Statutory requirements

Pupils should be taught to:

- 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

Statutory requirements

- 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.

Notes and guidance (non-statutory)

The focus should continue to be on pupils' comprehension as a primary element in reading. The knowledge and skills that pupils need in order to comprehend are very similar at different ages. This is why the programmes of study for comprehension in years 3 and 4 and years 5 and 6 are similar: the complexity of the writing increases the level of challenge.

Pupils should be taught to recognise themes in what they read, such as the triumph of good over evil or the use of magical devices in fairy stories and folk tales.

They should also learn the conventions of different types of writing (for example, the greeting in letters, a diary written in the first person or the use of presentational devices such as numbering and headings in instructions).

Pupils should be taught to use the skills they have learnt earlier and continue to apply these skills to read for different reasons, including for pleasure, or to find out information and the meaning of new words.

Notes and guidance (non-statutory)

Pupils should continue to have opportunities to listen frequently to stories, poems, non-fiction and other writing, including whole books and not just extracts, so that they build on what was taught previously. In this way, they also meet books and authors that they might not choose themselves. Pupils should also have opportunities to exercise choice in selecting books and be taught how to do so, with teachers making use of any library services and expertise to support this.

Reading, re-reading, and rehearsing poems and plays for presentation and performance give pupils opportunities to discuss language, including vocabulary, extending their interest in the meaning and origin of words. Pupils should be encouraged to use drama approaches to understand how to perform plays and poems to support their understanding of the meaning. These activities also provide them with an incentive to find out what expression is required, so feeding into comprehension.

In using non-fiction, pupils should know what information they need to look for before they begin and be clear about the task. They should be shown how to use contents pages and indexes to locate information.

Pupils should have guidance about the kinds of explanations and questions that are expected from them. They should help to develop, agree on, and evaluate rules for effective discussion. The expectation should be that all pupils take part.

Writing – transcription

Statutory requirements

Spelling (see English Appendix 1)

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils should learn to spell new words correctly and have plenty of practice in spelling them.

As in years 1 and 2, pupils should continue to be supported in understanding and applying the concepts of word structure (see English Appendix 2).

Pupils need sufficient knowledge of spelling in order to use dictionaries efficiently.

Statutory requirements

Handwriting

Pupils should be taught to:

- 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].

Notes and guidance (non-statutory)

Pupils should be using joined handwriting throughout their independent writing. Handwriting should continue to be taught, with the aim of increasing the fluency with which pupils are able to write down what they want to say. This, in turn, will support their composition and spelling.

Writing – composition

Statutory requirements

Pupils should be taught to:

- 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 (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 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.

Notes and guidance (non-statutory)

Pupils should continue to have opportunities to write for a range of real purposes and audiences as part of their work across the curriculum. These purposes and audiences should underpin the decisions about the form the writing should take, such as a narrative, an explanation or a description.

Pupils should understand, through being shown these, the skills and processes that are essential for writing: that is, thinking aloud to explore and collect ideas, drafting, and re-reading to check their meaning is clear, including doing so as the writing develops. Pupils should be taught to monitor whether their own writing makes sense in the same way that they monitor their reading, checking at different levels.

Writing – vocabulary, grammar and punctuation

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Grammar should be taught explicitly: pupils should be taught the terminology and concepts set out in English Appendix 2, and be able to apply them correctly to examples of real language, such as their own writing or books that they have read.

At this stage, pupils should start to learn about some of the differences between Standard English and non-Standard English and begin to apply what they have learnt [for example, in writing dialogue for characters].

English Appendix 1: Spelling

Most people read words more accurately than they spell them. The younger pupils are, the truer this is.

By the end of year 1, pupils should be able to read a large number of different words containing the GPCs that they have learnt, whether or not they have seen these words before. Spelling, however, is a very different matter. Once pupils have learnt more than one way of spelling particular sounds, choosing the right letter or letters depends on their either having made a conscious effort to learn the words or having absorbed them less consciously through their reading. Younger pupils have not had enough time to learn or absorb the accurate spelling of all the words that they may want to write.

This appendix provides examples of words embodying each pattern which is taught. Many of the words listed as 'example words' for years 1 and 2, including almost all those listed as 'exception words', are used frequently in pupils' writing, and therefore it is worth pupils learning the correct spelling. The 'exception words' contain GPCs which have not yet been taught as widely applicable, but this may be because they are applicable in very few age-appropriate words rather than because they are rare in English words in general.

The word-lists for years 3 and 4 and years 5 and 6 are statutory. The lists are a mixture of words pupils frequently use in their writing and those which they often misspell. Some of the listed words may be thought of as quite challenging, but the 100 words in each list can easily be taught within the four years of key stage 2 alongside other words that teachers consider appropriate.

The rules and guidance are intended to support the teaching of spelling. Phonic knowledge should continue to underpin spelling after key stage 1; teachers should still draw pupils' attention to GPCs that do and do not fit in with what has been taught so far. Increasingly, however, pupils also need to understand the role of morphology and etymology. Although particular GPCs in root words simply have to be learnt, teachers can help pupils to understand relationships between meaning and spelling where these are relevant. For example, understanding the relationship between *medical* and *medicine* may help pupils to spell the /s/ sound in *medicine* with the letter 'c'. Pupils can also be helped to spell words with prefixes and suffixes correctly if they understand some general principles for adding them. Teachers should be familiar with what pupils have been taught about spelling in earlier years, such as which rules pupils have been taught for adding prefixes and suffixes.

In this spelling appendix, the left-hand column is statutory; the middle and right-hand columns are non-statutory guidance.

The International Phonetic Alphabet (IPA) is used to represent sounds (phonemes). A table showing the IPA is provided in this document.

Spelling – work for years 3 and 4

Revision of work from years 1 and 2

Pay special attention to the rules for adding suffixes.

New work for years 3 and 4

Statutory requirements	Rules and guidance (non-statutory)	Example words (non-statutory)
Adding suffixes beginning with vowel letters to words of more than one syllable	If the last syllable of a word is stressed and ends with one consonant letter which has just one vowel letter before it, the final consonant letter is doubled before any ending beginning with a vowel letter is added. The consonant letter is not doubled if the syllable is unstressed.	forgetting, forgotten, beginning, beginner, prefer, preferred gardening, gardener, limiting, limited, limitation
The /ɪ/ sound spelt y elsewhere than at the end of words	These words should be learnt as needed.	myth, gym, Egypt, pyramid, mystery
The /ʌ/ sound spelt ou	These words should be learnt as needed.	young, touch, double, trouble, country
More prefixes	Most prefixes are added to the beginning of root words without any changes in spelling, but see **in–** below. Like **un–**, the prefixes **dis–** and **mis–** have negative meanings. The prefix **in–** can mean both 'not' and 'in'/'into'. In the words given here it means 'not'.	**dis–**: disappoint, disagree, disobey **mis–**: misbehave, mislead, misspell (mis + spell) **in–**: inactive, incorrect

Statutory requirements	Rules and guidance (non-statutory)	Example words (non-statutory)
	Before a root word starting with **l**, **in–** becomes **il**.	illegal, illegible
	Before a root word starting with **m** or **p**, **in–** becomes **im–**.	immature, immortal, impossible, impatient, imperfect
	Before a root word starting with **r**, **in–** becomes **ir–**.	irregular, irrelevant, irresponsible
	re– means 'again' or 'back'.	**re–**: redo, refresh, return, reappear, redecorate
	sub– means 'under'.	**sub–**: subdivide, subheading, submarine, submerge
	inter– means 'between' or 'among'.	**inter–**: interact, intercity, international, interrelated (inter + related)
	super– means 'above'.	**super–**: supermarket, superman, superstar
	anti– means 'against'.	**anti–**: antiseptic, anti-clockwise, antisocial
	auto– means 'self' or 'own'.	**auto–**: autobiography, autograph
The suffix –ation	The suffix **–ation** is added to verbs to form nouns. The rules already learnt still apply.	information, adoration, sensation, preparation, admiration
The suffix –ly	The suffix **–ly** is added to an adjective to form an adverb. The rules already learnt still apply. The suffix **–ly** starts with a consonant letter, so it is added straight on to most root words.	sadly, completely, usually (usual + ly), finally (final + ly), comically (comical + ly)

Statutory requirements	Rules and guidance (non-statutory)	Example words (non-statutory)
	Exceptions: (1) If the root word ends in –y with a consonant letter before it, the **y** is changed to **i**, but only if the root word has more than one syllable. (2) If the root word ends with **–le**, the **–le** is changed to **–ly**. (3) If the root word ends with **–ic**, **–ally** is added rather than just **–ly**, except in the word *publicly*. (4) The words *truly*, *duly*, *wholly*.	happily, angrily gently, simply, humbly, nobly basically, frantically, dramatically
Words with endings sounding like /ʒə/ or /tʃə/	The ending sounding like /ʒə/ is always spelt –**sure**. The ending sounding like /tʃə/ is often spelt **–ture**, but check that the word is not a root word ending in **(t)ch** with an **er** ending – e.g. *teacher, catcher, richer, stretcher.*	measure, treasure, pleasure, enclosure creature, furniture, picture, nature, adventure
Endings which sound like /ʒən/	If the ending sounds like /ʒən/, it is spelt as **–sion**.	division, invasion, confusion, decision, collision, television
The suffix –ous	Sometimes the root word is obvious and the usual rules apply for adding suffixes beginning with vowel letters. Sometimes there is no obvious root word. **–our** is changed to **–or** before **–ous** is added. A final 'e' of the root word must be kept if the /dʒ/ sound of 'g' is to be kept. If there is an /i:/ sound before the **–ous** ending, it is usually spelt as **i**, but a few words have **e**.	poisonous, dangerous, mountainous, famous, various tremendous, enormous, jealous humorous, glamorous, vigorous courageous, outrageous serious, obvious, curious hideous, spontaneous, courteous

Statutory requirements	Rules and guidance (non-statutory)	Example words (non-statutory)
Endings which sound like /ʃən/, spelt –tion, –sion, –ssion, –cian	Strictly speaking, the suffixes are **–ion** and **–ian**. Clues about whether to put **t**, **s**, **ss** or **c** before these suffixes often come from the last letter or letters of the root word. **–tion** is the most common spelling. It is used if the root word ends in **t** or **te**. **–ssion** is used if the root word ends in **ss** or **–mit**. **–sion** is used if the root word ends in **d** or **se**. **Exceptions**: *attend – attention*, *intend – intention*. **–cian** is used if the root word ends in **c** or **cs**.	invention, injection, action, hesitation, completion expression, discussion, confession, permission, admission expansion, extension, comprehension, tension musician, electrician, magician, politician, mathematician
Words with the /k/ sound spelt ch (Greek in origin)		scheme, chorus, chemist, echo, character
Words with the /ʃ/ sound spelt ch (mostly French in origin)		chef, chalet, machine, brochure
Words ending with the /g/ sound spelt –gue and the /k/ sound spelt –que (French in origin)		league, tongue, antique, unique
Words with the /s/ sound spelt sc (Latin in origin)	In the Latin words from which these words come, the Romans probably pronounced the **c** and the **k** as two sounds rather than one – /s/ /k/.	science, scene, discipline, fascinate, crescent
Words with the /eɪ/ sound spelt ei, eigh, or ey		vein, weigh, eight, neighbour, they, obey

Statutory requirements	Rules and guidance (non-statutory)	Example words (non-statutory)
Possessive apostrophe with plural words	The apostrophe is placed after the plural form of the word; **–s** is not added if the plural already ends in **–s**, but *is* added if the plural does not end in **–s** (i.e. is an irregular plural – e.g. *children's*).	girls', boys', babies', children's, men's, mice's (**Note:** singular proper nouns ending in an *s* use the 's suffix e.g. Cyprus's population)
Homophones and near-homophones		accept/except, affect/effect, ball/bawl, berry/bury, brake/break, fair/fare, grate/great, groan/grown, here/hear, heel/heal/he'll, knot/not, mail/male, main/mane, meat/meet, medal/meddle, missed/mist, peace/piece, plain/plane, rain/rein/reign, scene/seen, weather/whether, whose/who's

Word list – years 3 and 4

accident(ally)
actual(ly)
address
answer
appear
arrive
believe
bicycle
breath
breathe
build
busy/business
calendar
caught
centre
century
certain
circle
complete
consider
continue
decide
describe
different
difficult
disappear
early
earth
eight/eighth
enough
exercise
experience
experiment
extreme
famous
favourite
February
forward(s)
fruit
grammar
group
guard
guide
heard
heart
height
history
imagine
increase
important
interest
island
knowledge
learn
length
library
material
medicine
mention
minute
natural
naughty
notice
occasion(ally)
often
opposite
ordinary
particular
peculiar
perhaps
popular
position
possess(ion)
possible
potatoes
pressure
probably
promise
purpose
quarter
question
recent
regular
reign
remember
sentence
separate
special
straight
strange
strength
suppose
surprise
therefore
though/although
thought
through
various
weight
woman/women

Notes and guidance (non-statutory)

Teachers should continue to emphasise to pupils the relationships between sounds and letters, even when the relationships are unusual. Once root words are learnt in this way, longer words can be spelt correctly, if the rules and guidance for adding prefixes and suffixes are also known.

Notes and guidance (non-statutory)

Examples:

business: once busy is learnt, with due attention to the unusual spelling of the /i/ sound as 'u', business can then be spelt as **busy + ness**, with the **y** of **busy** changed to **i** according to the rule.

disappear: the root word *appear* contains sounds which can be spelt in more than one way so it needs to be learnt, but the prefix **dis–** is then simply added to **appear**.

Understanding the relationships between words can also help with spelling. Examples:

- *bicycle* is *cycle* (from the Greek for *wheel*) with **bi–** (meaning 'two') before it.
- *medicine* is related to *medical* so the /s/ sound is spelt as **c**.
- *opposite* is related to *oppose*, so the schwa sound in *opposite* is spelt as **o**.

English Appendix 2: Vocabulary, grammar and punctuation

The grammar of our first language is learnt naturally and implicitly through interactions with other speakers and from reading. Explicit knowledge of grammar is, however, very important, as it gives us more conscious control and choice in our language. Building this knowledge is best achieved through a focus on grammar within the teaching of reading, writing and speaking. Once pupils are familiar with a grammatical concept [for example 'modal verb'], they should be encouraged to apply and explore this concept in the grammar of their own speech and writing and to note where it is used by others. Young pupils, in particular, use more complex language in speech than in writing, and teachers should build on this, aiming for a smooth transition to sophisticated writing.

The table below focuses on Standard English and should be read in conjunction with the programmes of study as it sets out the statutory requirements. The table shows when concepts should be introduced first, not necessarily when they should be completely understood. It is very important, therefore, that the content in earlier years be revisited in subsequent years to consolidate knowledge and build on pupils' understanding. Teachers should also go beyond the content set out here if they feel it is appropriate.

The grammatical terms that pupils should learn are labelled as 'terminology for pupils'. They should learn to recognise and use the terminology through discussion and practice. All terms in **bold** should be understood with the meanings set out in the Glossary.

Vocabulary, grammar and punctuation – Years 1 to 6

Year 4: Detail of content to be introduced (statutory requirement)	
Word	The grammatical difference between **plural** and **possessive** –*s* Standard English forms for **verb inflections** instead of local spoken forms [for example, *we were* instead of *we was*, or *I did* instead of *I done*]
Sentence	Noun phrases expanded by the addition of modifying adjectives, nouns and preposition phrases (e.g. *the teacher* expanded to: *the strict maths teacher with curly hair*) **Fronted adverbials** [for example, *Later that day, I heard the bad news.*]
Text	Use of paragraphs to organise ideas around a theme Appropriate choice of **pronoun** or **noun** within and across **sentences** to aid **cohesion** and avoid repetition
Punctuation	Use of inverted commas and other **punctuation** to indicate direct speech [for example, a comma after the reporting clause; end punctuation within inverted commas: *The conductor shouted, "Sit down!"*] **Apostrophes** to mark **plural** possession [for example, *the girl's name*, *the girls' names*] Use of commas after **fronted adverbials**
Terminology for pupils	determiner pronoun, possessive pronoun adverbial

Glossary for the programmes of study for English (non-statutory)

The following glossary includes all the technical grammatical terms used in the programmes of study for English, as well as others that might be useful. It is intended as an aid for teachers, not as the body of knowledge that should be learnt by pupils. Apart from a few which are used only in schools (for example, *root word*), the terms below are used with the meanings defined here in most modern books on English grammar. It is recognised that there are different schools of thought on grammar, but the terms defined here clarify those being used in the programmes of study. For further details, teachers should consult the many books that are available.

Terms in definitions

As in any tightly structured area of knowledge, grammar, vocabulary and spelling involve a network of technical concepts that help to define each other. Consequently, the definition of one concept builds on other concepts that are equally technical. Concepts that are defined elsewhere in the glossary are hyperlinked. For some concepts, the technical definition may be slightly different from the meaning that some teachers may have learnt at school or may have been using with their own pupils; in these cases, the more familiar meaning is also discussed.

Term	Guidance	Example
active voice	An active verb has its usual pattern of subject and object (in contrast with the passive).	Active: *The school arranged a visit.* Passive: *A visit was arranged* by the school.
adjective	The surest way to identify adjectives is by the ways they can be used: ▪ before a noun, to make the noun's meaning more specific (i.e. to modify the noun), or ▪ after the verb *be*, as its complement. Adjectives cannot be modified by other adjectives. This distinguishes them from nouns, which can be. Adjectives are sometimes called 'describing words' because they pick out single characteristics such as size or colour. This is often true, but it doesn't help to distinguish adjectives from other word classes, because verbs, nouns and adverbs can do the same thing.	*The pupils did some really good work.* [adjective used before a noun, to modify it] *Their work was good.* [adjective used after the verb *be*, as its complement] Not adjectives: *The lamp glowed.* [verb] *It was such a bright red!* [noun] *He spoke loudly.* [adverb] *It was a French grammar book.* [noun]
adverb	The surest way to identify adverbs is by the ways they can be used: they can	*Usha soon started snoring loudly.* [adverbs modifying the verbs *started*

Term	Guidance	Example
	modify a verb, an adjective, another adverb or even a whole clause. Adverbs are sometimes said to describe manner or time. This is often true, but it doesn't help to distinguish adverbs from other word classes that can be used as adverbials, such as preposition phrases, noun phrases and subordinate clauses.	and *snoring*] *That match was really exciting!* [adverb modifying the adjective *exciting*] *We don't get to play games very often.* [adverb modifying the other adverb, *often*] *Fortunately, it didn't rain.* [adverb modifying the whole clause 'it didn't rain' by commenting on it] Not adverbs: ▪ *Usha went up the stairs.* [preposition phrase used as adverbial] ▪ *She finished her work this evening.* [noun phrase used as adverbial] ▪ *She finished when the teacher got cross.* [subordinate clause used as adverbial]
adverbial	An adverbial is a word or phrase that is used, like an adverb, to modify a verb or clause. Of course, adverbs can be used as adverbials, but many other types of words and phrases can be used this way, including preposition phrases and subordinate clauses.	The *bus leaves in five minutes.* [preposition phrase as adverbial: modifies *leaves*] *She promised to see him last night.* [noun phrase modifying either *promised* or *see*, according to the intended meaning] *She worked until she had finished.* [subordinate clause as adverbial]
antonym	Two words are antonyms if their meanings are opposites.	*hot – cold* *light – dark* *light – heavy*
apostrophe	Apostrophes have two completely different uses: ▪ showing the place of missing letters (e.g. *I'm* for *I am*) ▪ marking possessives (e.g. *Hannah's mother*).	*I'm going out and I won't be long.* [showing missing letters] *Hannah's mother went to town in Justin's car.* [marking possessives]
article	The articles *the* (definite) and *a* or *an* (indefinite) are the most common type of determiner.	*The dog found a bone in an old box.*

Term	Guidance	Example
auxiliary verb	The auxiliary verbs are: *be, have, do* and the modal verbs. They can be used to make questions and negative statements. In addition: ▪ *be* is used in the progressive and passive ▪ *have* is used in the perfect ▪ *do* is used to form questions and negative statements if no other auxiliary verb is present	*They are winning the match.* [*be* used in the progressive] *Have you finished your picture?* [*have* used to make a question, and the perfect] *No, I don't know him.* [*do* used to make a negative; no other auxiliary is present] *Will you come with me or not?* [modal verb *will* used to make a question about the other person's willingness]
clause	A clause is a special type of phrase whose head is a verb. Clauses can sometimes be complete sentences. Clauses may be main or subordinate. Traditionally, a clause had to have a finite verb, but most modern grammarians also recognise non-finite clauses.	*It was raining.* [single-clause sentence] *It was raining but we were indoors.* [two finite clauses] *If you are coming to the party, please let us know.* [finite subordinate clause inside a finite main clause] *Usha went upstairs to play on her computer.* [non-finite clause]
cohesion	A text has cohesion if it is clear how the meanings of its parts fit together. Cohesive devices can help to do this. In the example, there are repeated references to the same thing (shown by the different style pairings), and the logical relations, such as time and cause, between different parts are clear.	**A visit** has been arranged for ***Year 6***, to the Mountain Peaks Field Study Centre, leaving school at 9.30am. **This** is **an overnight visit**. The centre has beautiful grounds and *a nature trail*. During the afternoon, ***the children*** will follow *the trail*.
cohesive device	Cohesive devices are words used to show how the different parts of a text fit together. In other words, they create cohesion. Some examples of cohesive devices are: ▪ determiners and pronouns, which can refer back to earlier words ▪ conjunctions and adverbs, which can make relations between words clear ▪ ellipsis of expected words.	*Julia's dad bought her a football. The football was expensive!* [determiner; refers us back to a particular football] *Joe was given a bike for Christmas. He liked it very much.* [the pronouns refer back to Joe and the bike] *We'll be going shopping before we go to the park.* [conjunction; makes a relationship of time clear] *I'm afraid we're going to have to wait for the next train. Meanwhile, we could have a cup of tea.* [adverb; refers back to the time of waiting]

Term	Guidance	Example
		Where are you going? [__] To school! [ellipsis of the expected words *I'm going*; links the answer back to the question]
complement	A verb's subject complement adds more information about its subject, and its object complement does the same for its object. Unlike the verb's object, its complement may be an adjective. The verb *be* normally has a complement.	*She is our teacher.* [adds more information about the subject, *she*] *They seem very competent.* [adds more information about the subject, *they*] *Learning makes me happy.* [adds more information about the object, *me*]
compound, compounding	A compound word contains at least two root words in its morphology; e.g. *whiteboard, superman*. Compounding is very important in English.	*blackbird, blow-dry, bookshop, ice-cream, English teacher, inkjet, one-eyed, bone-dry, baby-sit, daydream, outgrow*
conjunction	A conjunction links two words or phrases together. There are two main types of conjunctions: ▪ co-ordinating conjunctions (e.g. *and*) link two words or phrases together as an equal pair ▪ subordinating conjunctions (e.g. *when*) introduce a subordinate clause.	*James bought a bat and ball.* [links the words *bat* and *ball* as an equal pair] *Kylie is young but she can kick the ball hard.* [links two clauses as an equal pair] *Everyone watches when Kyle does back-flips.* [introduces a subordinate clause] *Joe can't practise kicking because he's injured.* [introduces a subordinate clause]
consonant	A sound which is produced when the speaker closes off or obstructs the flow of air through the vocal tract, usually using lips, tongue or teeth. Most of the letters of the alphabet represent consonants. Only the letters *a*, e, *i*, *o*, *u* and *y* can represent vowel sounds.	/p/ [flow of air stopped by the lips, then released] /t/ [flow of air stopped by the tongue touching the roof of the mouth, then released] /f/ [flow of air obstructed by the bottom lip touching the top teeth] /s/ [flow of air obstructed by the tip of the tongue touching the gum line]
continuous	See progressive	
co-ordinate, co-ordination	Words or phrases are co-ordinated if they are linked as an equal pair by a co-ordinating conjunction (i.e. *and, but, or*). In the examples on the right, the co-	***Susan*** *and* ***Amra*** *met in a café.* [links the words *Susan* and *Amra* as an equal pair] ***They talked*** *and* ***drank tea*** *for an hour.* [links two clauses as an equal

Term	Guidance	Example
	ordinated elements are shown in bold, and the conjunction is underlined. The difference between co-ordination and subordination is that, in subordination, the two linked elements are not equal.	pair] ***Susan got a bus*** *but* ***Amra walked***. [links two clauses as an equal pair] Not co-ordination: *They ate before they met.* [*before* introduces a subordinate clause]
determiner	A determiner specifies a noun as known or unknown, and it goes before any modifiers (e.g. adjectives or other nouns). Some examples of determiners are: ▪ articles (*the*, *a* or *an*) ▪ demonstratives (e.g. *this*, *those*) ▪ possessives (e.g. *my*, *your*) ▪ quantifiers (e.g. *some*, *every*).	*the home team* [article, specifies the team as known] *a good team* [article, specifies the team as unknown] *that pupil* [demonstrative, known] *Julia's parents* [possessive, known] *some big boys* [quantifier, unknown] Contrast: *home the team, big some boys* [both incorrect, because the determiner should come before other modifiers]
digraph	A type of grapheme where two letters represent one phoneme. Sometimes, these two letters are not next to one another; this is called a split digraph.	The digraph *ea* in *each* is pronounced /iː/. The digraph *sh* in *shed* is pronounced /ʃ/. The split digraph *i–e* in *line* is pronounced /aɪ/.
ellipsis	Ellipsis is the omission of a word or phrase which is expected and predictable.	*Frankie waved to Ivana and ~~she~~ watched her drive away.* *She did it because she wanted to ~~do it~~.*
etymology	A word's etymology is its history: its origins in earlier forms of English or other languages, and how its form and meaning have changed. Many words in English have come from Greek, Latin or French.	The word *school* was borrowed from a Greek word *ó÷ïëÞ* (*skholé*) meaning 'leisure'. The word *verb* comes from Latin *verbum*, meaning 'word'. The word *mutton* comes from French *mouton*, meaning 'sheep'.
finite verb	Every sentence typically has at least one verb which is either past or present tense. Such verbs are called 'finite'. The imperative verb in a command is also finite.	*Lizzie does the dishes every day.* [present tense] *Even Hana did the dishes yesterday.* [past tense]

Term	Guidance	Example
	Verbs that are not finite, such as participles or infinitives, cannot stand on their own: they are linked to another verb in the sentence.	*Do the dishes, Naser!* [imperative] Not finite verbs: ▪ *I have done them.* [combined with the finite verb *have*] ▪ *I will do them.* [combined with the finite verb *will*] ▪ *I want to do them!* [combined with the finite verb *want*]
fronting, fronted	A word or phrase that normally comes after the verb may be moved before the verb: when this happens, we say it has been 'fronted'. For example, a fronted adverbial is an adverbial which has been moved before the verb. When writing fronted phrases, we often follow them with a comma.	*Before we begin, make sure you've got a pencil.* [Without fronting: *Make sure you've got a pencil before we begin.*] *The day after tomorrow, I'm visiting my granddad.* [Without fronting: *I'm visiting my granddad the day after tomorrow.*]
future	Reference to future time can be marked in a number of different ways in English. All these ways involve the use of a present-tense verb. See also tense. Unlike many other languages (such as French, Spanish or Italian), English has no distinct 'future tense' form of the verb comparable with its present and past tenses.	*He will leave tomorrow.* [present-tense *will* followed by infinitive *leave*] *He may leave tomorrow.* [present-tense *may* followed by infinitive *leave*] *He leaves tomorrow.* [present-tense *leaves*] *He is going to leave tomorrow.* [present tense *is* followed by *going to* plus the infinitive *leave*]
GPC	See grapheme-phoneme correspondences.	
grapheme	A letter, or combination of letters, that corresponds to a single phoneme within a word.	The grapheme *t* in the words *ten*, *bet* and *ate* corresponds to the phoneme /t/. The grapheme *ph* in the word *dolphin* corresponds to the phoneme /f/.
grapheme-phoneme correspondences	The links between letters, or combinations of letters (graphemes) and the speech sounds (phonemes) that they represent. In the English writing system, graphemes may correspond to different phonemes in different words.	The grapheme *s* corresponds to the phoneme /s/ in the word *see*, but… …it corresponds to the phoneme /z/ in the word *easy*.

Term	Guidance	Example
head	See phrase.	
homonym	Two different words are homonyms if they both look exactly the same when written, and sound exactly the same when pronounced.	*Has he left yet? Yes – he went through the door on the left.* *The noise a dog makes is called a bark. Trees have bark.*
homophone	Two different words are homophones if they sound exactly the same when pronounced.	*hear*, *here* *some*, *sum*
infinitive	A verb's infinitive is the basic form used as the head-word in a dictionary (e.g. *walk, be*). Infinitives are often used: ▪ after *to* ▪ after modal verbs.	*I want to walk.* *I will be quiet.*
inflection	When we add *-ed* to *walk*, or change *mouse* to *mice*, this change of morphology produces an inflection ('bending') of the basic word which has special grammar (e.g. past tense or plural). In contrast, adding *-er* to *walk* produces a completely different word, *walker*, which is part of the same word family. Inflection is sometimes thought of as merely a change of ending, but, in fact, some words change completely when inflected.	*dogs* is an inflection of *dog*. *went* is an inflection of *go*. *better* is an inflection of *good*.
intransitive verb	A verb which does not need an object in a sentence to complete its meaning is described as intransitive. See 'transitive verb'.	*We all laughed.* *We would like to stay longer, but we must leave.*
main clause	A sentence contains at least one clause which is not a subordinate clause; such a clause is a main clause. A main clause may contain any number of subordinate clauses.	*It was raining but the sun was shining*. [two main clauses] *The man* ***who wrote it*** *told me* ***that it was true***. [one main clause containing two subordinate clauses.] *She said, "It rained all day."* [one main clause containing another.]
modal verb	Modal verbs are used to change the meaning of other verbs. They can express meanings such as certainty,	*I can do this maths work by myself.* *This ride may be too scary for you!*

Term	Guidance	Example
	ability, or obligation. The main modal verbs are *will, would, can, could, may, might, shall, should, must* and *ought*. A modal verb only has finite forms and has no suffixes (e.g. *I sing – he sings*, but not *I must – he musts*).	*You should help your little brother.* *Is it going to rain? Yes, it might.* *Canning swim is important*. [not possible because *can* must be finite; contrast: *Being able to swim is important*, where *being* is not a modal verb]
modify, modifier	One word or phrase modifies another by making its meaning more specific. Because the two words make a phrase, the 'modifier' is normally close to the modified word.	In the phrase *primary-school teacher*: ▪ *teacher* is modified by *primary-school* (to mean a specific kind of teacher) ▪ *school* is modified by *primary* (to mean a specific kind of school).
morphology	A word's morphology is its internal make-up in terms of root words and suffixes or prefixes, as well as other kinds of change such as the change of *mouse* to *mice*. Morphology may be used to produce different inflections of the same word (e.g. *boy – boys*), or entirely new words (e.g. *boy – boyish*) belonging to the same word family. A word that contains two or more root words is a compound (e.g. *news+paper, ice+cream*).	*dogs* has the morphological make-up: *dog + s*. *unhelpfulness* has the morphological make-up: *unhelpful + ness* ▪ where *unhelpful = un + helpful* ▪ and *helpful = help + ful*
noun	The surest way to identify nouns is by the ways they can be used after determiners such as *the*: for example, most nouns will fit into the frame "The __ matters/matter." Nouns are sometimes called 'naming words' because they name people, places and 'things'; this is often true, but it doesn't help to distinguish nouns from other word classes. For example, prepositions can name places and verbs can name 'things' such as actions. Nouns may be classified as **common** (e.g. *boy, day*) or **proper** (e.g. *Ivan, Wednesday*), and also as **countable** (e.g. *thing, boy*) or **non-countable** (e.g. *stuff,*	*Our dog bit the burglar on his behind!* *My big brother did an amazing jump on his skateboard.* *Actions speak louder than words.* Not nouns: ▪ *He's behind you!* [this names a place, but is a preposition, not a noun] ▪ *She can jump so high!* [this names an action, but is a verb, not a noun] common, countable: *a book, books, two chocolates, one day, fewer ideas* common, non-countable: *money, some*

Term	Guidance	Example
	money). These classes can be recognised by the determiners they combine with.	*chocolate*, less *imagination* proper, countable: *Marilyn*, *London*, *Wednesday*
noun phrase	A noun phrase is a phrase with a noun as its head, e.g. *some foxes*, *foxes with bushy tails*. Some grammarians recognise one-word phrases, so that *foxes are multiplying* would contain the noun *foxes* acting as the head of the noun phrase *foxes*.	*Adult foxes can jump.* [*adult* modifies *foxes*, so *adult* belongs to the noun phrase] *Almost all healthy adult foxes in this area can jump.* [all the other words help to modify *foxes*, so they all belong to the noun phrase]
object	An object is normally a noun, pronoun or noun phrase that comes straight after the verb, and shows what the verb is acting upon. Objects can be turned into the subject of a passive verb, and cannot be adjectives (contrast with complements).	*Year 2 designed puppets.* [noun acting as object] *I like that.* [pronoun acting as object] Some people suggested a pretty display. [noun phrase acting as object] Contrast: ▪ *A display was suggested*. [object of active verb becomes the subject of the passive verb] ▪ *Year 2 designed pretty*. [incorrect, because adjectives cannot be objects]
participle	Verbs in English have two participles, called 'present participle' (e.g. *walking, taking*) and 'past participle' (e.g. *walked, taken*). Unfortunately, these terms can be confusing to learners, because: ▪ they don't necessarily have anything to do with present or past time ▪ although past participles are used as perfects (e.g. *has eaten*) they are also used as passives (e.g. *was eaten*).	*He is walking to school.* [present participle in a progressive] *He has taken the bus to school.* [past participle in a perfect] *The photo was taken in the rain.* [past participle in a passive]
passive	The sentence *It was eaten by our dog* is the passive of *Our dog ate it*. A passive is recognisable from: ▪ the past participle form *eaten* ▪ the normal object (*it*) turned into the subject	*A visit was arranged by the school.* *Our cat got run over by a bus.* Active versions: ▪ *The school arranged a visit.* ▪ *A bus ran over our cat.*

Term	Guidance	Example
	▪ the normal subject (*our dog*) turned into an optional preposition phrase with *by* as its head ▪ the verb *be*(*was*), or some other verb such as *get*. Contrast active. A verb is not 'passive' just because it has a passive meaning: it must be the passive version of an active verb.	Not passive: ▪ *He received a warning*. [past tense, active *received*] ▪ *We had an accident.* [past tense, active *had*]
past tense	Verbs in the past tense are commonly used to: ▪ talk about the past ▪ talk about imagined situations ▪ make a request sound more polite. Most verbs take a suffix *–ed*, to form their past tense, but many commonly-used verbs are irregular. See also tense.	*Tom and Chris showed me their new TV*. [names an event in the past] *Antonio went on holiday to Brazil*. [names an event in the past; irregular past of *go*] *I wish I had a puppy*. [names an imagined situation, not a situation in the past] *I was hoping you'd help tomorrow.* [makes an implied request sound more polite]
perfect	The perfect form of a verb generally calls attention to the consequences of a prior event; for example, *he has gone to lunch* implies that he is still away, in contrast with *he went to lunch*. 'Had gone to lunch' takes a past time point (i.e. when we arrived) as its reference point and is another way of establishing time relations in a text. The perfect tense is formed by: ▪ turning the verb into its past participle inflection ▪ adding a form of the verb *have* before it. It can also be combined with the progressive (e.g. *he has been going*).	*She has downloaded some songs.* [present perfect; now she has some songs] *I had eaten lunch when you came.* [past perfect; I wasn't hungry when you came]
phoneme	A phoneme is the smallest unit of sound that signals a distinct, contrasting meaning. For example: ▪ /t/ contrasts with /k/ to signal the difference between *tap* and *cap*	The word *cat* has three letters and three phonemes: /kæt/ The word *catch* has five letters and three phonemes: /katʃ/

Term	Guidance	Example
	▪ /t/ contrasts with /l/ to signal the difference between *bought* and *ball*. It is this contrast in meaning that tells us there are two distinct phonemes at work. There are around 44 phonemes in English; the exact number depends on regional accents. A single phoneme may be represented in writing by one, two, three or four letters constituting a single grapheme.	The word *caught* has six letters and three phonemes: /kɔ:t/
phrase	A phrase is a group of words that are grammatically connected so that they stay together, and that expand a single word, called the 'head'. The phrase is a noun phrase if its head is a noun, a preposition phrase if its head is a preposition, and so on; but if the head is a verb, the phrase is called a clause. Phrases can be made up of other phrases.	*She waved to her mother*. [a noun phrase, with the noun *mother* as its head] *She waved to her mother*. [a preposition phrase, with the preposition *to* as its head] *She waved to her mother*. [a clause, with the verb *waved* as its head]
plural	A plural noun normally has a suffix *–s* or *–es* and means 'more than one'. There are a few nouns with different morphology in the plural (e.g. *mice, formulae*).	*dogs* [more than one dog]; *boxes* [more than one box] *mice* [more than one mouse]
possessive	A possessive can be: ▪ a noun followed by an apostrophe, with or without *s* ▪ a possessive pronoun. The relation expressed by a possessive goes well beyond ordinary ideas of 'possession'. A possessive may act as a determiner.	*Tariq's book* [Tariq has the book] *The boys' arrival* [the boys arrive] *His obituary* [the obituary is about him] *That essay is mine*. [I wrote the essay]
prefix	A prefix is added at the beginning of a word in order to turn it into another word. Contrast suffix.	*overtake, disappear*
preposition	A preposition links a following noun, pronoun or noun phrase to some other word in the sentence. Prepositions	*Tom waved goodbye to Christy. She'll be back from Australia in two weeks.*

Term	Guidance	Example
	often describe locations or directions, but can describe other things, such as relations of time. Words like *before* or *since* can act either as prepositions or as conjunctions.	*I haven't seen my dog since this morning.* Contrast: *I'm going, since no-one wants me here!* [conjunction: links two clauses]
preposition phrase	A preposition phrase has a preposition as its head followed by a noun, pronoun or noun phrase.	*He was in bed.* *I met them after the party.*
present tense	Verbs in the present tense are commonly used to: ▪ talk about the present ▪ talk about the future. They may take a suffix *–s* (depending on the subject). See also tense.	*Jamal goes to the pool every day.* [describes a habit that exists now] *He can swim.* [describes a state that is true now] *The bus arrives at three.* [scheduled now] *My friends are coming to play.* [describes a plan in progress now]
progressive	The progressive (also known as the 'continuous') form of a verb generally describes events in progress. It is formed by combining the verb's present participle (e.g. *singing*) with a form of the verb *be* (e.g. *he was singing*). The progressive can also be combined with the perfect (e.g. *he has been singing*).	*Michael is singing in the store room.* [present progressive] *Amanda was making a patchwork quilt.* [past progressive] *Usha had been practising for an hour when I called.* [past perfect progressive]
pronoun	Pronouns are normally used like nouns, except that: ▪ they are grammatically more specialised ▪ it is harder to modify them In the examples, each sentence is written twice: once with nouns, and once with pronouns (underlined). Where the same thing is being talked about, the words are shown in bold.	***Amanda** waved to **Michael**.* ***She** waved to **him**.* ***John's** mother is over there. **His** mother is over there.* *The **visit** will be an overnight **visit**. **This** will be an overnight **visit**.* ***Simon** is the person: **Simon** broke it. **He** is the one **who** broke it.*
punctuation	Punctuation includes any conventional features of writing other than spelling and general layout: the standard punctuation marks . , ; : ? ! - – ( ) " " ' ' , and also word-spaces, capital letters, apostrophes, paragraph breaks and	*"I'm going out, Usha, and I won't be long," Mum said.*

Term	Guidance	Example
	bullet points. One important role of punctuation is to indicate sentence boundaries.	
Received Pronunciation	Received Pronunciation (often abbreviated to RP) is an accent which is used only by a small minority of English speakers in England. It is not associated with any one region. Because of its regional neutrality, it is the accent which is generally shown in dictionaries in the UK (but not, of course, in the USA). RP has no special status in the national curriculum.	
register	Classroom lessons, football commentaries and novels use different registers of the same language, recognised by differences of vocabulary and grammar. Registers are 'varieties' of a language which are each tied to a range of uses, in contrast with dialects, which are tied to groups of users.	*I regret to inform you that Mr Joseph Smith has passed away.* [formal letter] *Have you heard that Joe has died?* [casual speech] *Joe falls down and dies, centre stage.* [stage direction]
relative clause	A relative clause is a special type of subordinate clause that modifies a noun. It often does this by using a relative pronoun such as *who* or *that* to refer back to that noun, though the relative pronoun *that* is often omitted. A relative clause may also be attached to a clause. In that case, the pronoun refers back to the whole clause, rather than referring back to a noun. In the examples, the relative clauses are underlined, and both the pronouns and the words they refer back to are in bold.	*That's the* ***boy who*** *lives near school.* [*who* refers back to *boy*] *The* ***prize that*** *I won was a book.* [*that* refers back to *prize*] *The* ***prize*** *I won was a book.* [the pronoun *that* is omitted] ***Tom broke the game, which*** *annoyed Ali.* [*which* refers back to the whole clause]
root word	Morphology breaks words down into root words, which can stand alone, and suffixes or prefixes which can't. For example, *help* is the root word for other words in its word family such as *helpful* and *helpless*, and also for its inflections such as *helping*. Compound words (e.g. *help-desk*) contain two or	*played* [the root word is *play*] *unfair* [the root word is *fair*] *football* [the root words are *foot* and *ball*]

Term	Guidance	Example
	more root words. When looking in a dictionary, we sometimes have to look for the root word (or words) of the word we are interested in.	
schwa	The name of a vowel sound that is found only in unstressed positions in English. It is the most common vowel sound in English. It is written as /ə/ in the International Phonetic Alphabet. In the English writing system, it can be written in many different ways.	/əlɒŋ/ [*along*] /bʌtə/ [*butter*] /dɒktə/ [*doctor*]
sentence	A sentence is a group of words which are grammatically connected to each other but not to any words outside the sentence. The form of a sentence's main clause shows whether it is being used as a statement, a question, a command or an exclamation. A sentence may consist of a single clause or it may contain several clauses held together by subordination or co-ordination. Classifying sentences as 'simple', 'complex' or 'compound' can be confusing, because a 'simple' sentence may be complicated, and a 'complex' one may be straightforward. The terms **'single-clause sentence'** and **'multi-clause sentence'** may be more helpful.	*John went to his friend's house. He stayed there till tea-time.* *John went to his friend's house, he stayed there till tea-time.* [This is a 'comma splice', a common error in which a comma is used where either a full stop or a semi-colon is needed to indicate the lack of any grammatical connection between the two clauses.] *You are my friend.* [statement] *Are you my friend?* [question] *Be my friend!* [command] *What a good friend you are!* [exclamation] *Ali went home on his bike to his goldfish and his current library book about pets.* [single-clause sentence] *She went shopping but took back everything she had bought because she didn't like any of it.* [multi-clause sentence]
split digraph	See digraph.	
Standard English	Standard English can be recognised by the use of a very small range of forms such as *those books, I did it* and *I wasn't doing anything* (rather than their non-Standard equivalents); it is not limited to any particular accent. It is the variety of English which is used, with only minor	*I did it because they were not willing to undertake any more work on those houses.* [formal Standard English] *I did it cos they wouldn't do any more work on those houses.* [casual Standard English] *I done it cos they wouldn't do no more*

Term	Guidance	Example
	variation, as a major world language. Some people use Standard English all the time, in all situations from the most casual to the most formal, so it covers most registers. The aim of the national curriculum is that everyone should be able to use Standard English as needed in writing and in relatively formal speaking.	*work on them houses.* [casual non-Standard English]
stress	A syllable is stressed if it is pronounced more forcefully than the syllables next to it. The other syllables are unstressed.	*about* *visit*
subject	The subject of a verb is normally the noun, noun phrase or pronoun that names the 'do-er' or 'be-er'. The subject's normal position is: ▪ just before the verb in a statement ▪ just after the auxiliary verb, in a question. Unlike the verb's object and complement, the subject can determine the form of the verb (e.g. *I am*, *you are*).	*Rula's mother went out.* *That is uncertain.* *The children will study the animals.* *Will the children study the animals?*
subjunctive	In some languages, the inflections of a verb include a large range of special forms which are used typically in subordinate clauses, and are called 'subjunctives'. English has very few such forms and those it has tend to be used in rather formal styles.	*The school requires that all pupils be honest.* *The school rules demand that pupils not enter the gym at lunchtime.* *If Zoë were the class president, things would be much better.*
subordinate, subordination	A subordinate word or phrase tells us more about the meaning of the word it is subordinate to. Subordination can be thought of as an unequal relationship between a subordinate word and a main word. For example: ▪ an adjective is subordinate to the noun it modifies ▪ subjects and objects are subordinate to their verbs. Subordination is much more common than the equal relationship of co-ordination.	*big dogs* [*big* is subordinate to *dogs*] *Big dogs need long walks.* [*big dogs* and *long walks* are subordinate to *need*] *We can watch TV when we've finished.* [*when we've finished* is subordinate to *watch*]

Term	Guidance	Example
	See also subordinate clause.	
subordinate clause	A clause which is subordinate to some other part of the same sentence is a subordinate clause; for example, in *The apple that I ate was sour*, the clause *that I ate* is subordinate to *apple* (which it modifies). Subordinate clauses contrast with co-ordinate clauses as in *It was sour but looked very tasty*. (Contrast: main clause) However, clauses that are directly quoted as direct speech are not subordinate clauses.	*That's the street where Ben lives.* [relative clause; modifies *street*] *He watched her as she disappeared.* [adverbial; modifies *watched*] *What you said was very nice.* [acts as subject of *was*] *She noticed an hour had passed.* [acts as object of *noticed*] Not subordinate: *He shouted, "Look out!"*
suffix	A suffix is an 'ending', used at the end of one word to turn it into another word. Unlike root words, suffixes cannot stand on their own as a complete word. Contrast prefix.	*call – called* *teach – teacher* [turns a verb into a noun] *terror – terrorise* [turns a noun into a verb] *green – greenish* [leaves word class unchanged]
syllable	A syllable sounds like a beat in a word. Syllables consist of at least one vowel, and possibly one or more consonants.	*Cat* has one syllable. *Fairy* has two syllables. *Hippopotamus* has five syllables.
synonym	Two words are synonyms if they have the same meaning, or similar meanings. Contrast antonym.	*talk – speak* *old – elderly*
tense	In English, tense is the choice between present and past verbs, which is special because it is signalled by inflections and normally indicates differences of time. In contrast, languages like French, Spanish and Italian, have three or more distinct tense forms, including a future tense. (See also: future.) The simple tenses (present and past) may be combined in English with the perfect and progressive.	*He studies.* [present tense – present time] *He studied yesterday.* [past tense – past time] *He studies tomorrow, or else!* [present tense – future time] *He may study tomorrow.* [present tense + infinitive – future time] *He plans to study tomorrow.* [present tense + infinitive – future time] *If he studied tomorrow, he'd see the difference!* [past tense – imagined

Term	Guidance	Example
		future] Contrast three distinct tense forms in Spanish: ▪ *Estudia.* [present tense] ▪ *Estudió.* [past tense] ▪ *Estudiará.* [future tense]
transitive verb	A transitive verb takes at least one object in a sentence to complete its meaning, in contrast to an intransitive verb, which does not.	*He loves Juliet.* *She understands English grammar.*
trigraph	A type of grapheme where three letters represent one phoneme.	*High, pure, patch, hedge*
unstressed	See stressed.	
verb	The surest way to identify verbs is by the ways they can be used: they can usually have a tense, either present or past (see also future). Verbs are sometimes called 'doing words' because many verbs name an action that someone does; while this can be a way of recognising verbs, it doesn't distinguish verbs from nouns (which can also name actions). Moreover many verbs name states or feelings rather than actions. Verbs can be classified in various ways: for example, as auxiliary, or modal; as transitive or intransitive; and as states or events.	*He lives in Birmingham.* [present tense] *The teacher wrote a song for the class.* [past tense] *He likes chocolate.* [present tense; not an action] *He knew my father.* [past tense; not an action] Not verbs: ▪ *The walk to Halina's house will take an hour.* [noun] ▪ *All that surfing makes Morwenna so sleepy!* [noun]
vowel	A vowel is a speech sound which is produced without any closure or obstruction of the vocal tract. Vowels can form syllables by themselves, or they may combine with consonants. In the English writing system, the letters *a*, *e*, *i*, *o*, *u* and *y* can represent vowels.	
word	A word is a unit of grammar: it can be selected and moved around relatively independently, but cannot easily be split. In punctuation, words are normally separated by word spaces. Sometimes, a sequence that appears grammatically to be two words is collapsed into a single written word, indicated with a hyphen or apostrophe	*headteacher* or *head teacher* [can be written with or without a space] *I'm* going out. *9.30 am*

Term	Guidance	Example
	(e.g. *well-built, he's*).	
word class	Every word belongs to a word class which summarises the ways in which it can be used in grammar. The major word classes for English are: noun, verb, adjective, adverb, preposition, determiner, pronoun, conjunction. Word classes are sometimes called 'parts of speech'.	
word family	The words in a word family are normally related to each other by a combination of morphology, grammar and meaning.	*teach – teacher* *extend – extent – extensive* *grammar – grammatical – grammarian*

Mathematics

Purpose of study

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Aims

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

Information and communication technology (ICT)

Calculators should not be used as a substitute for good written and mental arithmetic. They should therefore only be introduced near the end of key stage 2 to support pupils' conceptual understanding and exploration of more complex number problems, if written and mental arithmetic are secure. In both primary and secondary schools, teachers should use their judgement about when ICT tools should be used.

Spoken language

The national curriculum for mathematics reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof. They must be assisted in making their thinking clear to themselves as well as others and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions.

School curriculum

The programmes of study for mathematics are set out year-by-year for key stages 1 and 2. Schools are, however, only required to teach the relevant programme of study by the end of the key stage. Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study. In addition, schools can introduce key stage content during an earlier key stage, if appropriate. All schools are also required to set out their school curriculum for mathematics on a year-by-year basis and make this information available online.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets] or the content indicated as being 'non-statutory'.

Geometry – position and direction

Statutory requirements

Pupils should be taught to:

- order and arrange combinations of mathematical objects in patterns and sequences
- use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

Notes and guidance (non-statutory)

Pupils should work with patterns of shapes, including those in different orientations.

Pupils use the concept and language of angles to describe 'turn' by applying rotations, including in practical contexts (for example, pupils themselves moving in turns, giving instructions to other pupils to do so, and programming robots using instructions given in right angles).

Statistics

Statutory requirements

Pupils should be taught to:

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totalling and comparing categorical data.

Notes and guidance (non-statutory)

Pupils record, interpret, collate, organise and compare information (for example, using many-to-one correspondence in pictograms with simple ratios 2, 5, 10).

Lower key stage 2 – years 3 and 4

The principal focus of mathematics teaching in lower key stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers.

At this stage, pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching should also ensure that pupils draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number.

By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work.

Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.

Year 4 programme of study

Number – number and place value

Statutory requirements

Pupils should be taught to

- 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.

Notes and guidance (non-statutory)

Using a variety of representations, including measures, pupils become fluent in the order and place value of numbers beyond 1000, including counting in tens and hundreds, and maintaining fluency in other multiples through varied and frequent practice.

They begin to extend their knowledge of the number system to include the decimal numbers and fractions that they have met so far.

They connect estimation and rounding numbers to the use of measuring instruments.

Roman numerals should be put in their historical context so pupils understand that there have been different ways to write whole numbers and that the important concepts of zero and place value were introduced over a period of time.

Number – addition and subtraction

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils continue to practise both mental methods and columnar addition and subtraction with increasingly large numbers to aid fluency (see English Appendix 1).

Number – multiplication and division

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.

Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example 600 ÷ 3 = 200 can be derived from 2 x 3 = 6).

Notes and guidance (non-statutory)

Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see Mathematics Appendix 1).

Pupils write statements about the equality of expressions (for example, use the distributive law $39 \times 7 = 30 \times 7 + 9 \times 7$ and associative law $(2 \times 3) \times 4 = 2 \times (3 \times 4)$). They combine their knowledge of number facts and rules of arithmetic to solve mental and written calculations for example, 2 x 6 x 5 = 10 x 6 = 60.

Pupils solve two-step problems in contexts, choosing the appropriate operation, working with increasingly harder numbers. This should include correspondence questions such as the numbers of choices of a meal on a menu, or three cakes shared equally between 10 children.

Number – fractions (including decimals)

Statutory requirements

Pupils should be taught to:

- 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 $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
- 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.

Notes and guidance (non-statutory)

Pupils should connect hundredths to tenths and place value and decimal measure.

They extend the use of the number line to connect fractions, numbers and measures.

Pupils understand the relation between non-unit fractions and multiplication and division of quantities, with particular emphasis on tenths and hundredths.

Pupils make connections between fractions of a length, of a shape and as a representation of one whole or set of quantities. Pupils use factors and multiples to recognise equivalent fractions and simplify where appropriate (for example, $\frac{6}{9} = \frac{2}{3}$ or $\frac{1}{4} = \frac{2}{8}$).

Pupils continue to practise adding and subtracting fractions with the same denominator, to become fluent through a variety of increasingly complex problems beyond one whole.

Pupils are taught throughout that decimals and fractions are different ways of expressing numbers and proportions.

Pupils' understanding of the number system and decimal place value is extended at this stage to tenths and then hundredths. This includes relating the decimal notation to division of whole number by 10 and later 100.

They practise counting using simple fractions and decimals, both forwards and backwards.

Pupils learn decimal notation and the language associated with it, including in the context of measurements. They make comparisons and order decimal amounts and quantities that are expressed to the same number of decimal places. They should be able to represent numbers with one or two decimal places in several ways, such as on number lines.

Measurement

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils build on their understanding of place value and decimal notation to record metric measures, including money.

They use multiplication to convert from larger to smaller units.

Perimeter can be expressed algebraically as $2(a + b)$ where a and b are the dimensions in the same unit.

They relate area to arrays and multiplication.

Geometry – properties of shapes

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils continue to classify shapes using geometrical properties, extending to classifying different triangles (for example, isosceles, equilateral, scalene) and quadrilaterals (for example, parallelogram, rhombus, trapezium).

Pupils compare and order angles in preparation for using a protractor and compare lengths and angles to decide if a polygon is regular or irregular.

Pupils draw symmetric patterns using a variety of media to become familiar with different orientations of lines of symmetry; and recognise line symmetry in a variety of diagrams, including where the line of symmetry does not dissect the original shape.

Geometry – position and direction

Statutory requirements

Pupils should be taught to:

Statutory requirements

- 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.

Notes and guidance (non-statutory)

Pupils draw a pair of axes in one quadrant, with equal scales and integer labels. They read, write and use pairs of coordinates, for example (2, 5), including using coordinate-plotting ICT tools.

Statistics

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils understand and use a greater range of scales in their representations.

Pupils begin to relate the graphical representation of data to recording change over time.

Science

Purpose of study

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims

The national curriculum for science aims to ensure that all pupils:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.

Scientific knowledge and conceptual understanding

The programmes of study describe a sequence of knowledge and concepts. While it is important that pupils make progress, it is also vitally important that they develop secure understanding of each key block of knowledge and concepts in order to progress to the next stage. Insecure, superficial understanding will not allow genuine progression: pupils may struggle at key points of transition (such as between primary and secondary school), build up serious misconceptions, and/or have significant difficulties in understanding higher-order content.

Pupils should be able to describe associated processes and key characteristics in common language, but they should also be familiar with, and use, technical terminology accurately and precisely. They should build up an extended specialist vocabulary. They should also apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data. The social and economic implications of science are important but, generally, they are taught most appropriately within the wider school curriculum: teachers will wish to use different contexts to maximise their pupils' engagement with and motivation to study science.

The nature, processes and methods of science

'Working scientifically' specifies the understanding of the nature, processes and methods of science for each year group. It should not be taught as a separate strand. The notes and guidance give examples of how 'working scientifically' might be embedded within the content of biology, chemistry and physics, focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. These types of scientific enquiry should include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils should seek answers to questions through collecting, analysing and presenting data. 'Working scientifically' will be developed further at key stages 3 and 4, once pupils have built up sufficient understanding of science to engage meaningfully in more sophisticated discussion of experimental design and control.

Spoken language

The national curriculum for science reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their scientific vocabulary and articulating scientific concepts clearly and precisely. They must be assisted in making their thinking clear, both to themselves and others, and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions.

School curriculum

The programmes of study for science are set out year-by-year for key stages 1 and 2. Schools are, however, only required to teach the relevant programme of study by the end of the key stage. Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study. In addition, schools can introduce key stage content during an earlier key stage if appropriate. All schools are also required to set out their school curriculum for science on a year-by-year basis and make this information available online.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the content indicated as being 'non-statutory'.

Lower key stage 2 – years 3 and 4

The principal focus of science teaching in lower key stage 2 is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

'Working scientifically' is described separately at the beginning of the programme of study, but must **always** be taught through and clearly related to substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content.

Pupils should read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge.

Lower key stage 2 programme of study

Working scientifically

Statutory requirements

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- 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.

Notes and guidance (non-statutory)

Pupils in years 3 and 4 should be given a range of scientific experiences to enable them to raise their own questions about the world around them. They should start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions; recognise when a simple fair test is necessary and help to decide how to set it up; talk about criteria for grouping, sorting and classifying; and use simple keys. They should begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. They should help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used.

They should learn how to use new equipment, such as data loggers, appropriately. They should collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data. With help, pupils should look for changes, patterns, similarities and differences in their data in order

Notes and guidance (non-statutory)

to draw simple conclusions and answer questions. With support, they should identify new questions arising from the data, making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done. They should also recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations. Pupils should use relevant scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences.

These opportunities for working scientifically should be provided across years 3 and 4 so that the expectations in the programme of study can be met by the end of year 4. Pupils are not expected to cover each aspect for every area of study.

Year 4 programme of study

Living things and their habitats

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils should use the local environment throughout the year to raise and answer questions that help them to identify and study plants and animals in their habitat. They should identify how the habitat changes throughout the year. Pupils should explore possible ways of grouping a wide selection of living things that include animals and flowering plants and non-flowering plants. Pupils could begin to put vertebrate animals into groups such as fish, amphibians, reptiles, birds, and mammals; and invertebrates into snails and slugs, worms, spiders, and insects.

Note: Plants can be grouped into categories such as flowering plants (including grasses) and non-flowering plants, such as ferns and mosses.

Pupils should explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population and development, litter or deforestation.

Pupils might work scientifically by: using and making simple guides or keys to explore and identify local plants and animals; making a guide to local living things; raising and answering questions based on their observations of animals and what they have found out about other animals that they have researched.

Animals, including humans

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils should be introduced to the main body parts associated with the digestive system, for example, mouth, tongue, teeth, oesophagus, stomach and small and large intestine and explore questions that help them to understand their special functions.

Pupils might work scientifically by: comparing the teeth of carnivores and herbivores, and suggesting reasons for differences; finding out what damages teeth and how to look after them. They might draw and discuss their ideas about the digestive system and compare them with models or images.

States of matter

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils should explore a variety of everyday materials and develop simple descriptions of the states of matter (solids hold their shape; liquids form a pool not a pile; gases escape from an unsealed container). Pupils should observe water as a solid, a liquid and a gas and should note the changes to water when it is heated or cooled.

Notes and guidance (non-statutory)

Note: Teachers should avoid using materials where heating is associated with chemical change, for example, through baking or burning.

Pupils might work scientifically by: grouping and classifying a variety of different materials; exploring the effect of temperature on substances such as chocolate, butter, cream (for example, to make food such as chocolate crispy cakes and ice-cream for a party). They could research the temperature at which materials change state, for example, when iron melts or when oxygen condenses into a liquid. They might observe and record evaporation over a period of time, for example, a puddle in the playground or washing on a line, and investigate the effect of temperature on washing drying or snowmen melting.

Sound

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils should explore and identify the way sound is made through vibration in a range of different musical instruments from around the world; and find out how the pitch and volume of sounds can be changed in a variety of ways.

Pupils might work scientifically by: finding patterns in the sounds that are made by different objects such as saucepan lids of different sizes or elastic bands of different thicknesses. They might make earmuffs from a variety of different materials to investigate which provides the best insulation against sound. They could make and play their own instruments by using what they have found out about pitch and volume.

Electricity

Statutory requirements

Pupils should be taught to:

- 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.

Notes and guidance (non-statutory)

Pupils should construct simple series circuits, trying different components, for example, bulbs, buzzers and motors, and including switches, and use their circuits to create simple devices. Pupils should draw the circuit as a pictorial representation, not necessarily using conventional circuit symbols at this stage; these will be introduced in year 6.

Note: Pupils might use the terms current and voltage, but these should not be introduced or defined formally at this stage. Pupils should be taught about precautions for working safely with electricity.

Pupils might work scientifically by: observing patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be used to connect across a gap in a circuit.

Art and design

Purpose of study

Art, craft and design embody some of the highest forms of human creativity. A high-quality art and design education should engage, inspire and challenge pupils, equipping them with the knowledge and skills to experiment, invent and create their own works of art, craft and design. As pupils progress, they should be able to think critically and develop a more rigorous understanding of art and design. They should also know how art and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation.

Aims

The national curriculum for art and design aims to ensure that all pupils:

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design
- know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Subject content

Key stage 2

Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

Pupils should be taught:

- 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.

Computing

Purpose of study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Subject content

Key stage 2

Pupils should be taught to:

- design, write and debug 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
- 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; 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Design and technology

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aims

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Subject content

Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

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

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

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

Key stage 2

- 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.

Geography

Purpose of study

A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes. As pupils progress, their growing knowledge about the world should help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Geographical knowledge, understanding and skills provide the frameworks and approaches that explain how the Earth's features at different scales are shaped, interconnected and change over time.

Aims

The national curriculum for geography aims to ensure that all pupils:

- develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time
- are competent in the geographical skills needed to:
  - collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes
  - interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)
  - communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Subject content

Key stage 2

Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.

Pupils should be taught to:

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 and 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 and 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.

History

Purpose of study

A high-quality history education will help pupils gain a coherent knowledge and understanding of Britain's past and that of the wider world. It should inspire pupils' curiosity to know more about the past. Teaching should equip pupils to ask perceptive questions, think critically, weigh evidence, sift arguments, and develop perspective and judgement. History helps pupils to understand the complexity of people's lives, the process of change, the diversity of societies and relationships between different groups, as well as their own identity and the challenges of their time.

Aims

The national curriculum for history aims to ensure that all pupils:

- know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day: how people's lives have shaped this nation and how Britain has influenced and been influenced by the wider world
- know and understand significant aspects of the history of the wider world: the nature of ancient civilisations; the expansion and dissolution of empires; characteristic features of past non-European societies; achievements and follies of mankind
- gain and deploy a historically grounded understanding of abstract terms such as 'empire', 'civilisation', 'parliament' and 'peasantry'
- understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts, including written narratives and analyses
- understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed
- gain historical perspective by placing their growing knowledge into different contexts, understanding the connections between local, regional, national and international history; between cultural, economic, military, political, religious and social history; and between short- and long-term timescales.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets] or the content indicated as being 'non-statutory'.

Subject content

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.

In planning to ensure the progression described above through teaching the British, local and world history outlined below, teachers should combine overview and depth studies to help pupils understand both the long arc of development and the complexity of specific aspects of the content.

Pupils should be taught about:

- changes in Britain from the Stone Age to the Iron Age

  Examples (non-statutory)

  This could include:

  - late Neolithic hunter-gatherers and early farmers, for example, Skara Brae
  - Bronze Age religion, technology and travel, for example, Stonehenge
  - Iron Age hill forts: tribal kingdoms, farming, art and culture

- the Roman Empire and its impact on Britain

  Examples (non-statutory)

  This could include:

  - Julius Caesar's attempted invasion in 55-54 BC
  - the Roman Empire by AD 42 and the power of its army
  - successful invasion by Claudius and conquest, including Hadrian's Wall
  - British resistance, for example, Boudica
  - 'Romanisation' of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity

- Britain's settlement by Anglo-Saxons and Scots

Examples (non-statutory)

This could include:

- Roman withdrawal from Britain in c. AD 410 and the fall of the western Roman Empire
- Scots invasions from Ireland to north Britain (now Scotland)
- Anglo-Saxon invasions, settlements and kingdoms: place names and village life
- Anglo-Saxon art and culture
- Christian conversion – Canterbury, Iona and Lindisfarne

- the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor

Examples (non-statutory)

This could include:

- Viking raids and invasion
- resistance by Alfred the Great and Athelstan, first king of England
- further Viking invasions and Danegeld
- Anglo-Saxon laws and justice
- Edward the Confessor and his death in 1066

- a local history study

Examples (non-statutory)

- a depth study linked to one of the British areas of study listed above
- a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066)
- a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.

- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066

Examples (non-statutory)

- the changing power of monarchs using case studies such as John, Anne and Victoria
- changes in an aspect of social history, such as crime and punishment from the Anglo-Saxons to the present or leisure and entertainment in the 20th Century
- the legacy of Greek or Roman culture (art, architecture or literature) on later periods in

Examples (non-statutory)

British history, including the present day

- a significant turning point in British history, for example, the first railways or the Battle of Britain

- 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.

Languages

Purpose of study

Learning a foreign language is a liberation from insularity and provides an opening to other cultures. A high-quality languages education should foster pupils' curiosity and deepen their understanding of the world. The teaching should enable pupils to express their ideas and thoughts in another language and to understand and respond to its speakers, both in speech and in writing. It should also provide opportunities for them to communicate for practical purposes, learn new ways of thinking and read great literature in the original language. Language teaching should provide the foundation for learning further languages, equipping pupils to study and work in other countries.

Aims

The national curriculum for languages aims to ensure that all pupils:

- understand and respond to spoken and written language from a variety of authentic sources
- speak with increasing confidence, fluency and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation
- can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt
- discover and develop an appreciation of a range of writing in the language studied.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Subject content

Key stage 2: Foreign language

Teaching may be of any modern or ancient foreign language and should focus on enabling pupils to make substantial progress in one language. The teaching should provide an appropriate balance of spoken and written language and should lay the foundations for further foreign language teaching at key stage 3. It should enable pupils to understand and communicate ideas, facts and feelings in speech and writing, focused on familiar and routine matters, using their knowledge of phonology, grammatical structures and vocabulary.

The focus of study in modern languages will be on practical communication. If an ancient language is chosen the focus will be to provide a linguistic foundation for reading comprehension and an appreciation of classical civilisation. Pupils studying ancient languages may take part in simple oral exchanges, while discussion of what they read will be conducted in English. A linguistic foundation in ancient languages may support the study of modern languages at key stage 3.

Pupils should be taught to:

- 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 above will not be applicable to ancient languages.

Music

Purpose of study

Music is a universal language that embodies one of the highest forms of creativity. A high-quality music education should engage and inspire pupils to develop a love of music and their talent as musicians, and so increase their self-confidence, creativity and sense of achievement. As pupils progress, they should develop a critical engagement with music, allowing them to compose, and to listen with discrimination to the best in the musical canon.

Aims

The national curriculum for music aims to ensure that all pupils:

- perform, listen to, review and evaluate music across a range of historical periods, genres, styles and traditions, including the works of the great composers and musicians
- learn to sing and to use their voices, to create and compose music on their own and with others, have the opportunity to learn a musical instrument, use technology appropriately and have the opportunity to progress to the next level of musical excellence
- understand and explore how music is created, produced and communicated, including through the inter-related dimensions: pitch, duration, dynamics, tempo, timbre, texture, structure and appropriate musical notations.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Subject content

Key stage 2

Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.

Pupils should be taught to:

- 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.

Physical education

Purpose of study

A high-quality physical education curriculum inspires all pupils to succeed and excel in competitive sport and other physically-demanding activities. It should provide opportunities for pupils to become physically confident in a way which supports their health and fitness. Opportunities to compete in sport and other activities build character and help to embed values such as fairness and respect.

Aims

The national curriculum for physical education aims to ensure that all pupils:

- develop competence to excel in a broad range of physical activities
- are physically active for sustained periods of time
- engage in competitive sports and activities
- lead healthy, active lives.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Subject content

Key stage 2

Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement. They should enjoy communicating, collaborating and competing with each other. They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success.

Pupils should be taught to:

- 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 and water safety

All schools must provide swimming instruction either in key stage 1 or key stage 2.

In particular, pupils should be taught to:

- 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.