Weston Primary School

Key Assessment Criteria

‘I can’ statements for each subject with

2014 National Curriculum Links

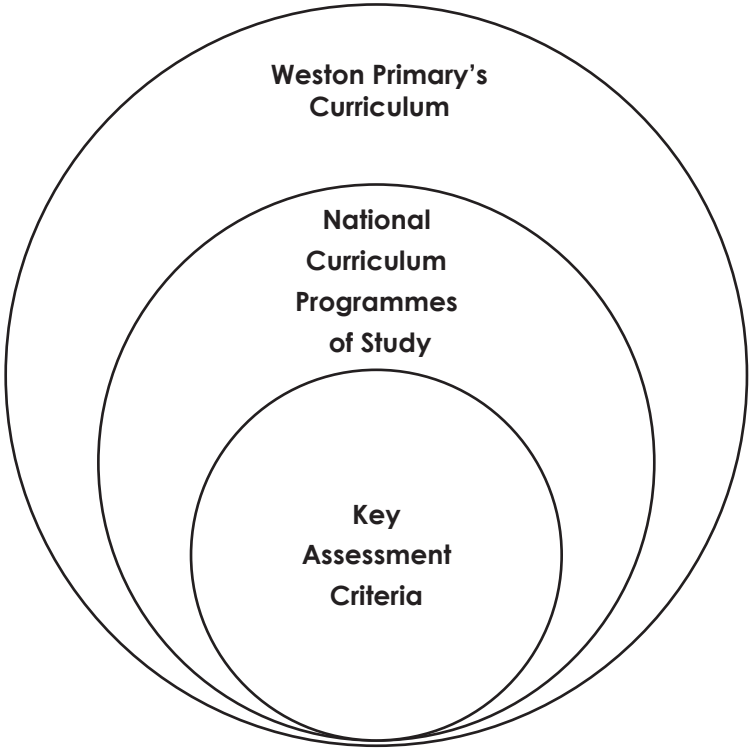
Contents

Purpose

The purpose of this publication is to outline the key assessment criteria for each year group, for each subject.

This is intended to help primary teachers plan and assess.

There is no intention to try and assess everything. Inevitably, in collating these criteria, choices had to be taken. We have attempted to identify the 'key assessment criteria'.



Key

Pages which contain the **DFE logo** are extracted directly from the National Curriculum for England from September 2014. These outline the expected curriculum content for each year group and key stage.

Department for Education

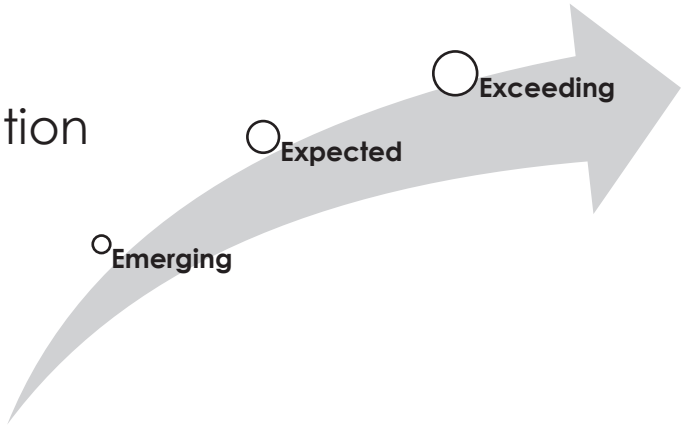
Pages with the **subject logos** are a suggested set of criteria for best fit assessment in each year group.

Best fit

The criteria in this publication are intended to be applied professionally by teachers, i.e. there is no formula or algorithm for deciding the assessed outcome.

Teachers need to use the criteria in a holistic way and decide on the best fit outcome. The criteria in this publication will be useful for teachers to ask rich questions and probe understanding.

School leaders need to put robust moderation processes in place to ensure equity and consistency across the school/academy.



Depth & security

When assessing it is worth remembering the focus of the new National Curriculum:

- Learn fewer things in greater depth
- Ensure secure and deep understanding

These were the pointers that the government learned when they investigated the highest performing jurisdictions in the world.

This means that it is critical for children to have depth of learning and be entirely secure with their year group expectations, being able to use them 'inside out' before moving on to progressively more challenging learning.

Key Assessment Criteria

Being a speaker

The key assessment criteria for spoken language have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as speakers.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

What the National Curriculum requires in spoken language at KS1 and KS2

Department for Education

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.

Spoken language

Key Assessment Criteria: *Being a speaker*

A year 1 speaker	A year 2 speaker	A year 3 speaker
• I speak clearly and confidently in front of people in my class. • I can re-tell a well known story and remember the main characters. • I can hold attention when playing and learning with others. • I can keep to the main topic when we are talking in a group. • I can ask questions in order to get more information. • I can start a conversation with an adult I know well or with my friends. • I listen carefully to the things other people have to say in a group. • I join in with conversations in a group. • I join in with role play.	• I can ask question to get more information and clarify meaning. • I can talk in complete sentences. • I can decide when I need to use specific vocabulary. • I can take turns when talking in pairs or a small group. • I am aware that formal and informal situations require different language (beginning). • I can retell a story using narrative language and linking words and phrases. • I can hold the attention of people I am speaking to by adapting the way I talk. • I understand how to speak for different purposes and audiences (beginning). • I can perform a simple poem from memory.	• I can sequence and communicate ideas in an organised and logical way, always using complete sentences. • I vary the amount of detail and choice of vocabulary, depending on the purpose and the audience. • I take a full part in paired and group discussions. • I show that I know when Standard English is required and use it (beginning). • I can retell a story using narrative language and add relevant detail. • I can show that I have listened carefully because I make relevant comments. • I can present ideas or information to an audience. • I recognise that meaning can be expressed in different ways, depending on the context. • I can perform poems from memory adapting expression and tone as appropriate.

Key Assessment Criteria: *Being a speaker*

A year 4 speaker	A year 5 speaker	A year 6 speaker
• I ask questions to clarify or develop my understanding. • I can sequence, develop and communicate ideas in an organised and logical way, always using complete sentences. • I show that I understand the main point and the details in a discussion. • I adapt what I am saying to the needs of the listener or audience (increasingly). • I show that I know that language choices vary in different contexts. • I can present to an audience using appropriate intonation; controlling the tone and volume so that the meaning is clear. • I can justify an answer by giving evidence. • I use Standard English when it is required. • I cam perform poems or plays from memory, conveying ideas about characters and situations by adapting expression and tone.	• I can engage the listener by varying my expression and vocabulary. • I adapt my spoken language depending on the audience, the purpose or the context. • I can develop my ideas and opinions, providing relevant detail. • I can express my point of view. • I show that I understand the main points, including implied meanings in a discussion. • I listen carefully in discussions. I make contributions and ask questions that are responsive to others' ideas and views. • I use Standard English in formal situations. • I am beginning to use hypothetical language to consider more than one possible outcome or solution. • I can perform my own compositions, using appropriate intonation and volume so that meaning is clear. • I can perform poems and plays from memory, making careful choices about how I convey ideas. I adapt my expression and tone. • I begin to select the appropriate register according to the context.	• I talk confidently and fluently in a range of situations, using formal and Standard English, if necessary. • I ask questions to develop ideas and take account of others' views. • I explain ideas and opinions giving reasons and evidence. • I take an active part in discussions and can take on different roles. • I listen to, and consider the opinions of, others in discussions. • I make contributions to discussions, evaluating others' ideas and respond to them. • I can sustain and argue a point of view in a debate, using the formal language of persuasion. • I can express possibilities using hypothetical and speculative language. • I engage listeners through choosing appropriate vocabulary and register that is matched to the context. • I can perform my own compositions, using appropriate intonation, volume and expression so that literal and implied meaning is clear. • I can perform poems and plays from memory, making deliberate choices about how to convey ideas about characters, contexts and atmosphere.

Key Assessment Criteria

Being a reader

The key assessment criteria for reading have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as readers.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

What the National Curriculum requires in reading at Y1

Department for Education

Word reading

- apply phonic knowledge and skills as the route to decode words
- respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes, including, where applicable, alternative sounds for graphemes
- read accurately by blending sounds in unfamiliar words containing GPCs that have been taught
- read common exception words, noting unusual correspondences between spelling and sound and where these occur in the word
- read words containing taught GPCs and –s, –es, –ing, –ed, –er and –est endings
- read other words of more than one syllable that contain taught GPCs
- read words with contractions [for example, I'm, I'll, we'll], and understand that the apostrophe represents the omitted letter(s)
- read aloud accurately books that are consistent with their developing phonic knowledge and that do not require them to use other strategies to work out words
- re-read these books to build up their fluency and confidence in word reading.

Word reading

Comprehension

- develop pleasure in reading, motivation to read, vocabulary and understanding by:
  - listening to and discussing a wide range of poems, stories and non-fiction at a level beyond that at which they can read independently
  - being encouraged to link what they read or hear read to their own experiences
  - becoming very familiar with key stories, fairy stories and traditional tales, retelling them and considering their particular characteristics
  - recognising and joining in with predictable phrases
  - learning to appreciate rhymes and poems, and to recite some by heart
  - discussing word meanings, linking new meanings to those already known
- understand both the books they can already read accurately and fluently and those they listen to by:
  - drawing on what they already know or on background information and vocabulary provided by the teacher
  - checking that the text makes sense to them as they read and correcting inaccurate reading
  - discussing the significance of the title and events
  - making inferences on the basis of what is being said and done
  - predicting what might happen on the basis of what has been read so far
- participate in discussion about what is read to them, taking turns and listening to what others say
- explain clearly their understanding of what is read to them.

Comprehension

What the National Curriculum requires in reading at Y2

Department for Education

Word reading

- continue to apply phonic knowledge and skills as the route to decode words until automatic decoding has become embedded and reading is fluent
- read accurately by blending the sounds in words that contain the graphemes taught so far, especially recognising alternative sounds for graphemes
- read accurately words of two or more syllables that contain the same graphemes as above
- read words containing common suffixes
- read further common exception words, noting unusual correspondences between spelling and sound and where these occur in the word
- read most words quickly and accurately, without overt sounding and blending, when they have been frequently encountered
- read aloud books closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation
- re-read these books to build up their fluency and confidence in word reading.

Word reading

Comprehension

- develop pleasure in reading, motivation to read, vocabulary and understanding by:
    - listening to, discussing and expressing views about a wide range of contemporary and classic poetry, stories and non-fiction at a level beyond that at which they can read independently
    - discussing the sequence of events in books and how items of information are related
    - becoming increasingly familiar with and retelling a wider range of stories, fairy stories and traditional tales
    - being introduced to non-fiction books that are structured in different ways
    - recognising simple recurring literary language in stories and poetry
    - discussing and clarifying the meanings of words, linking new meanings to known vocabulary
    - discussing their favourite words and phrases
    - continuing to build up a repertoire of poems learnt by heart, appreciating these and reciting some, with appropriate intonation to make the meaning clear
- understand both the books that they can already read accurately and fluently and those that they listen to by:
    - drawing on what they already know or on background information and vocabulary provided by the teacher
    - checking that the text makes sense to them as they read and correcting inaccurate reading
    - making inferences on the basis of what is being said and done
    - answering and asking questions
    - predicting what might happen on the basis of what has been read so far
- participate in discussion about books, poems and other works that are read to them and those that they can read for themselves, taking turns and listening to what others say
- explain and discuss their understanding of books, poems and other material, both those that they listen to and those that they read for themselves.

Comprehension

What the National Curriculum requires in reading at Y3 and Y4

Department for Education

Word reading

- apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in Appendix 1 of the National Curriculum, 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.

Word reading

Comprehension

- develop positive attitudes to reading and understanding of what they read by:
    - listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
    - reading books that are structured in different ways and reading for a range of purposes
    - using dictionaries to check the meaning of words that they have read
    - increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
    - identifying themes and conventions in a wide range of books
    - preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
    - discussing words and phrases that capture the reader's interest and imagination
    - recognising some different forms of poetry [for example, free verse, narrative poetry]
- understand what they read, in books they can read independently, by:
    - checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
    - asking questions to improve their understanding of a text
    - drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
    - predicting what might happen from details stated and implied
    - identifying main ideas drawn from more than one paragraph and summarising these
    - identifying how language, structure, and presentation contribute to meaning
- retrieve and record information from non-fiction
- participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.

Comprehension

What the National Curriculum requires in reading at Y5 and Y6

Department for Education

Word reading

- apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in Appendix 1 of the National Curriculum, both to read aloud and to understand the meaning of new words that they meet.

Word reading

Comprehension

- maintain positive attitudes to reading and understanding of what they read by:
  - continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
  - reading books that are structured in different ways and reading for a range of purposes
  - increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions
  - recommending books that they have read to their peers, giving reasons for their choices
  - identifying and discussing themes and conventions in and across a wide range of writing
  - making comparisons within and across books
  - learning a wider range of poetry by heart
  - preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience
- understand what they read by:
  - checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
  - asking questions to improve their understanding
  - drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
  - predicting what might happen from details stated and implied
  - summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
  - identifying how language, structure and presentation contribute to meaning
- discuss and evaluate how authors use language, including figurative language, considering the impact on the reader
- distinguish between statements of fact and opinion
- retrieve, record and present information from non-fiction
- participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
- explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
- provide reasoned justifications for their views.

Comprehension

KS1 Reading 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in reading by the end of Key Stage One.

Making inferences
- Make simple and general inferences based on the text
- Make simple and general predictions based on the text

Comprehension
- Identify the meaning of vocabulary in context
- Identify sequences of events in a range of straightforward texts
- Identify how information is related and/or organised within texts

Provide simple explanations for:
- The significance of titles in fiction and non-fiction texts
- Events and characters' actions
- Key information
- Retrieve details from fiction and non-fiction to demonstrate understanding of character, events and information

Language for effect
- Identify simple and recurring literary language

KS2 Reading 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in reading by the end of Key Stage Two.

Themes and conventions
- Accurately identify the features, themes and conventions of a range of fiction
- Accurately identify the features, themes and conventions of a range of non-fiction text types and forms
- Draw on evidence within texts to explain how themes emerge and conventions are applied in a range of genres and conventions of fiction and non-fiction

Making inferences
- Make developed inferences drawing on evidence from the text
- Explain and justify inferences, providing evidence from the text to support reasoning
- Make developed predictions that are securely rooted in the text

Comprehension
- Show an understanding of the meaning of vocabulary in context
- Accurately and selectively summarise main ideas, events, characters and information in fiction and non-fiction texts
- Identify language, structural and presentational features used in texts
- Provide developed explanation for key information and events and characters' actions and motivations
- Provide straightforward explanations for the purpose of the language, structure and presentation of texts
- Retrieve key details and quotations from fiction and non-fiction to demonstrate understanding of character, events and information
- Make accurate and appropriate comparisons within texts
- Correctly distinguish between statements of fact and opinion

Language for effect
- Identify a range of figurative language
- Explain the effect of figurative language

Key Assessment Criteria: *Being a reader*

A year 1 reader	
Word reading	**Comprehension**
• I can match all 40+ graphemes to their phonemes. • I can blend sounds in unfamiliar words. • I can divide words into syllables. • I can read compound words. • I can read words with contractions and understand that the apostrophe represents the missing letters. • I can read phonetically decodable words. • I can read words that end with 's, -ing, -ed, -est • I can read words which start with un-. • I can add –ing, -ed and –er to verbs. (Where no change is needed to the root word) • I can read words of more than one syllable that contain taught GPCs.	• I can say what I like and do not like about a text. • I can link what I have heard or read to my own experiences. • I can retell key stories orally using narrative language. • I can talk about the main characters within a well known story. • I can learn some poems and rhymes by heart. • I can use what I already know to understand texts. • I can check that my reading makes sense and go back to correct when it doesn't. • I can draw inferences from the text and/or the illustrations. (Beginning) • I can make predictions about the events in the text. • I can explain what I think a text is about.

Key Assessment Criteria: *Being a reader*

A year 2 reader	
Word reading	**Comprehension**
• I can decode automatically and fluently. • I can blend sounds in words that contain the graphemes we have learnt. • I can recognise and read alternative sounds for graphemes. • I can read accurately words of two or more syllables that contain the same GPCs. • I can read words with common suffixes. • I can read common exception words. • I can read and comment on unusual correspondence between grapheme and phoneme. • I read most words quickly and accurately when I have read them before without sounding out and blending. • I can read most suitable books accurately, showing fluency and confidence.	• I can talk about and give an opinion on a range of texts. • I can discuss the sequence of events in books and how they relate to each other. • I use prior knowledge, including context and vocabulary, to understand texts. • I can retell stories, including fairy stories and traditional tales. • I can read for meaning and check that the text makes sense. I go back and re-read when it does not makes sense. • I can find recurring language in stories and poems. • I can talk about my favourite words and phrases in stories and poems. • I can recite some poems by heart, with appropriate intonation. • I can answer and ask questions. • I can make predictions based on what I have read. • I can draw (simple) inferences from illustrations, events, characters' actions and speech.

Key Assessment Criteria: *Being a reader*

A year 3 reader	
Word reading	**Comprehension**
• I can apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words. • I can read further exception words, noting the unusual correspondences between spelling and sound. • I attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words.	• I read a range of fiction, poetry, plays, and non-fiction texts. • I can discuss the texts that I read. • I can read aloud and independently, taking turns and listening to others. • I can explain how non-fiction books are structured in different ways and can use them effectively. • I can explain some of the different types of fiction books. • I can ask relevant questions to get a better understanding of a text. • I can predict what might happen based on details I have. • I can draw inferences such as inferring a characters' feelings, thoughts and motives from their actions. • I can use a dictionary to check the meaning of unfamiliar words. • I can identify the main point of a text. • I can explain how structure and presentation contribute to the meaning of texts. • I can use non-fiction texts to retrieve information. • I can prepare poems to read aloud and to perform, showing understanding through intonation, tone, volume and action.

Key Assessment Criteria: *Being a reader*

A year 4 reader	
Word reading	**Comprehension**
• I can apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words. • I can read further exception words, noting the unusual correspondences between spelling and sound. • I attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words.	• I know which books to select for specific purposes, especially in relation to science, geography and history learning. • I can use a dictionary to check the meaning of unfamiliar words. • I can discuss and record words and phrases that writers use to engage and impact on the reader. • I can identify some of the literary conventions in different texts. • I can identify the (simple) themes in texts. • I can prepare poems to read aloud and to perform, showing understanding through intonation, tone, volume and action. • I can explain the meaning of words in context. • I can ask relevant questions to improve my understanding of a text. • I can infer meanings and begin to justify them with evidence from the text. • I can predict what might happen from details stated and from the information I have deduced. • I can identify where a writer has used precise word choices for effect to impact on the reader. • I can identify some text type organisational features, for example, narrative, explanation and persuasion. • I can retrieve information from non-fiction texts. • I can build on others' ideas and opinions about a text in discussion.

Key Assessment Criteria: *Being a reader*

A year 5 reader	
Word reading	**Comprehension**
• I can apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words. • I can read further exception words, noting the unusual correspondences between spelling and sound. • I attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words. • I can re-read and read ahead to check for meaning.	• I am familiar with and can talk about a wide range of books and text types, including myths, legends and traditional stories and books from other cultures and traditions. I can discuss the features of each. • I can read non-fiction texts and identify the purpose, structure and grammatical features, evaluating how effective they are. • I can identify significant ideas, events and characters; and discuss their significance. • I can recite poems by heart, e.g. narrative verse, haiku. • I can prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone, volume and action.

Key Assessment Criteria: *Being a reader*

A year 6 reader	
Word reading	**Comprehension**
• I can apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words. • I use my combined knowledge of phonemes and word deriviations to pronounce words correctly, e.g. arachnophobia. • I attempt the pronunciation of unfamiliar words drawing on my prior knowledge of similar looking words. • I can read fluently, using punctuation to inform meaning.	• I am familiar with and can talk about a wide range of books and text types, including myths, legends and traditional stories and books from other cultures and traditions. I can discuss the features of each. • I can read books that are structured in different ways. • I can recognise texts that contain features from more than one text type. • I can evaluate how effectively texts are structured and presented. • I can read non-fiction texts to help with my learning. • I read accurately and check that I understand. • I can recommend books to others and give reasons for my recommendation. • I can identify themes in texts. • I can identify and discuss the conventions in different text types. • I can identify the key points in a text. • I can recite a range of poems by heart, e.g. narrative verse, sonnet. • I can prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone, volume and action.

Key Assessment Criteria

Being a writer

The key assessment criteria for writing have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as writers.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

What the National Curriculum requires in writing at Y1

Department for Education

Writing - transcription

- spell:
  - words containing each of the 40+ phonemes already taught
  - common exception words
  - the days of the week
- name the letters of the alphabet:
  - naming the letters of the alphabet in order
  - using letter names to distinguish between alternative spellings of the same sound
- add prefixes and suffixes:
  - using the spelling rule for adding –s or –es as the plural marker for nouns and the third person singular marker for verbs
  - using the prefix un–
  - using –ing, –ed, –er and –est where no change is needed in the spelling of root words [for example, helping, helped, helper, quicker, quickest]
- apply simple spelling rules and guidance, as listed in Appendix 1 of the National Curriculum
- write from memory simple sentences dictated by the teacher that include words using the GPCs and common exception words taught so far.

Spelling

Handwriting

- sit correctly at a table, holding a pencil comfortably and correctly
- begin to form lower-case letters in the correct direction, starting and finishing in the right place
- form capital letters
- form digits 0-9
- understand which letters belong to which handwriting 'families' (i.e. letters that are formed in similar ways) and to practise these.

Handwriting

Writing - composition

- write sentences by:
  - saying out loud what they are going to write about
  - composing a sentence orally before writing it
  - sequencing sentences to form short narratives
  - re-reading what they have written to check that it makes sense
- discuss what they have written with the teacher or other pupils
- read aloud their writing clearly enough to be heard by their peers and the teacher.

Composition

- develop their understanding of the concepts set out in Appendix 2 of the National Curriculum by:
  - leaving spaces between words
  - joining words and joining clauses using and
  - beginning to punctuate sentences using a capital letter and a full stop, question mark or exclamation mark
  - using a capital letter for names of people, places, the days of the week, and the personal pronoun 'I'
  - learning the grammar for year 1 in English Appendix 2
- use the grammatical terminology in English Appendix 2 in discussing their writing.

Vocabulary, grammar & punctuation

What the National Curriculum requires in writing at Y2

Department for Education

Writing - transcription

- spell by:
  - segmenting spoken words into phonemes and representing these by graphemes, spelling many correctly
  - learning new ways of spelling phonemes for which one or more spellings are already known, and learn some words with each spelling, including a few common homophones
  - learning to spell common exception words
  - learning to spell more words with contracted forms
  - learning the possessive apostrophe (singular) [for example, the girl's book]
  - distinguishing between homophones and near-homophones
- add suffixes to spell longer words, including –ment, –ness, –ful, –less, –ly
- apply spelling rules and guidance, as listed in Appendix 1 of the National Curriculum
- write from memory simple sentences dictated by the teacher that include words using the GPCs, common exception words and punctuation taught so far.

Spelling

Handwriting

- form lower-case letters of the correct size relative to one another
- start using some of the diagonal and horizontal strokes needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- write capital letters and digits of the correct size, orientation and relationship to one another and to lower case letters
- use spacing between words that reflects the size of the letters.

Handwriting

Writing - composition

- develop positive attitudes towards and stamina for writing by:
  - writing narratives about personal experiences and those of others (real and fictional)
  - writing about real events
  - writing poetry
  - writing for different purposes
- consider what they are going to write before beginning by:
  - planning or saying out loud what they are going to write about
  - writing down ideas and/or key words, including new vocabulary
  - encapsulating what they want to say, sentence by sentence
- make simple additions, revisions and corrections to their own writing by:
  - evaluating their writing with the teacher and other pupils
  - re-reading to check that their writing makes sense and that verbs to indicate time are used correctly and consistently, including verbs in the continuous form
  - proof-reading to check for errors in spelling, grammar and punctuation [for example, ends of sentences punctuated correctly]
- read aloud what they have written with appropriate intonation to make the meaning clear.

Composition

- develop their understanding of the concepts set out in Appendix 2 of the National Curriculum by:
  - learning how to use both familiar and new punctuation correctly (see English Appendix 2), including full stops, capital letters, exclamation marks, question marks, commas for lists and apostrophes for contracted forms and the possessive (singular)
- learn how to use:
  - sentences with different forms: statement, question, exclamation, command
  - expanded noun phrases to describe and specify [for example, the blue butterfly]
  - the present and past tenses correctly and consistently including the progressive form
  - subordination (using when, if, that, or because) and co-ordination (using or, and, or but)
  - the grammar for year 2 in English Appendix 2
  - some features of written Standard English
- use and understand the grammatical terminology in English Appendix 2 in discussing their writing.

Vocabulary, grammar & punctuation

What the National Curriculum requires in writing at Y3 and Y4

Department for Education

Writing - transcription

- 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.

Spelling

Handwriting

- use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

Handwriting

Writing - composition

- plan their writing by:
  - discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
  - discussing and recording ideas
- draft and write by:
  - composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures – see Appendix 2 of the National Curriculum
  - 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.

Composition

- develop their understanding of the concepts set out in Appendix 2 of the National Curriculum 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.

Vocabulary, grammar & punctuation

What the National Curriculum requires in writing at Y5 and Y6

Department for Education

Writing - transcription

- use further prefixes and suffixes and understand the guidance for adding them
- spell some words with 'silent' letters [for example, knight, psalm, solemn]
- continue to distinguish between homophones and other words which are often confused
- use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1
- use dictionaries to check the spelling and meaning of words
- use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary
- use a thesaurus

Spelling

Handwriting

- write legibly, fluently and with increasing speed by:
    - choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters
    - choosing the writing implement that is best suited for a task.

Handwriting

Writing - composition

- plan their writing by:
    - identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
    - noting and developing initial ideas, drawing on reading and research where necessary
    - in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed
- draft and write by:
    - selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
    - in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
    - précising longer passages
    - using a wide range of devices to build cohesion within and across paragraphs
    - using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]
- evaluate and edit by:
    - assessing the effectiveness of their own and others' writing
    - proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
    - ensuring the consistent and correct use of tense throughout a piece of writing
    - ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
- proof-read for spelling and punctuation errors
- perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

Composition

- develop their understanding of the concepts set out in Appendix 2 of the National Curriculum by:
    - recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms
    - using passive verbs to affect the presentation of information in a sentence
    - using the perfect form of verbs to mark relationships of time and cause
    - using expanded noun phrases to convey complicated information concisely
    - using modal verbs or adverbs to indicate degrees of possibility
    - using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun
    - learning the grammar for years 5 and 6 in English Appendix 2
- indicate grammatical and other features by:
    - using commas to clarify meaning or avoid ambiguity in writing
    - using hyphens to avoid ambiguity
    - using brackets, dashes or commas to indicate parenthesis
    - using semi-colons, colons or dashes to mark boundaries between independent clauses
    - using a colon to introduce a list
    - punctuating bullet points consistently
- use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.

Vocabulary, grammar & punctuation

KS1 Grammar, punctuation & spelling 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in grammar, punctuation and spelling by the end of Key Stage One.

- Use some variety of sentence types as is appropriate to the given task, e.g. commands to instruct the reader; statements to give information.
- Able to introduce additional detail in their writing through the use of, for example, adjectives (including comparatives), adverbs, or simple expanded noun phrases (e.g. *the small cottage / the small cottage with the red door*).
- Clauses are mostly joined with co-ordinating conjunctions (*and, but, or*), with some use of subordination (e.g. to indicate cause or time).
- Tense is appropriate and mostly consistent in simple and progressive past and present forms.
- Sentences are usually demarcated with capital letters and full stops, or with appropriate use of question and exclamation marks.
- Capital letters are used to mark some proper nouns and always for the personal pronoun 'I'. There is some use of internal sentence punctuation, including commas to separate items in a list and apostrophes to mark contracted forms.
- Handwriting is legible. Capital and lower-case letters are accurately and consistently formed with appropriate spacing and consistent size.

KS1 Grammar, punctuation & spelling 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in grammar, punctuation and spelling by the end of Key Stage One.

Grammar and vocabulary

- Demonstrate familiarity with some word classes and their use, including nouns, verbs, adjectives and adverbs
- Apply this terminology to identify familiar words within each word class when presented in a context
- Recognise different types of sentences, including statements, questions, commands and exclamations
- Write different types of sentences including statements, questions, commands and exclamations when prompted
- Understand that the coordinating conjunctions *and*, *or*, *but* link words and clauses and use them to construct and extend sentences
- Add a subordinate clause to a main clause using a simple subordinating conjunction (e.g. *when, if, because, that*) when prompted
- Combine or expand given words to make noun phrases, clauses or sentences
- Identify the present or past tense forms of familiar, regular verbs and some high-frequency irregular verbs (e.g. *has / had*)
- Apply correct endings to regular verb forms to indicate present and past tense, including the progressive form to mark actions in progress (e.g. *the lion is running / Ellie was shouting*)
- Demonstrate Standard English subject-verb agreement (e.g. *we were* as opposed to *we was*)
- Identify and select some appropriate language for the context such as formal, informal or Standard English as appropriate
- Understand that the prefix *un-* can change the meaning of some words
- Use some straightforward suffixes to form nouns and adjectives, including the suffixes *–er* and *–est* to form comparative adjectives.

KS1 Grammar, punctuation & spelling 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in grammar, punctuation and spelling by the end of Key Stage One.

Punctuation

- Identify and use appropriate end punctuation for demarcating different sentence types (full stop, question mark and exclamation mark)
- Identify and use a capital letter to start a sentence, for names and for the personal pronoun *I*
- Identify and insert commas in a list of single words
- Use apostrophes to construct simple contracted verb forms from given full forms, using correct spelling
- Identify the correct use of the apostrophe to denote singular possession and sometimes use the apostrophe correctly for this purpose.

Spelling

- Usually accurately spell simple monosyllabic and polysyllabic words, including high-frequency homophones and near-homophones in context
- Draw on their developing phonological, morphological and lexical awareness to apply the rules and patterns set out in the statutory Appendix 1 of the 2014 national curriculum.

KS2 Grammar, punctuation & spelling 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in grammar, punctuation and spelling by the end of Key Stage Two.

Grammar

- Demonstrate familiarity with a range of word classes and their use, including nouns, verbs, adjectives, conjunctions, pronouns, adverbs, prepositions and determiners;
- Apply this terminology to identify familiar words within each word class when presented in a context;
- Recognise and write different types of sentences, including statements, questions, commands and exclamations;
- Demonstrate familiarity with terms relating to a sentence, including subject and object;
- Distinguish between co-ordinating and subordinating conjunctions and use them to link clauses appropriately;
- Identify and use main clauses and subordinate clauses (including relative clauses) in a sentence and construct expanded noun phrases for description and concision;
- Identify and construct fronted adverbial phrases to denote time and place (e.g.: *Later that day*, *I met Tina*.);
- Select pronouns appropriately for clarity and cohesion (e.g. ***The children*** *will be visiting the* ***activity centre***. ***They*** *will try all the activities* ***it*** *has to offer*.);
- Distinguish between formal and informal varieties of English (e.g. active / passive, subjunctive) and Standard and non-Standard varieties of English (e.g. use of *I* and *me*);
- Use Standard English and formal or informal structures when appropriate;
- Select and construct regular and irregular verb forms that express present and past time, including the progressive and perfect forms (e.g. *We are hoping to win. I had swum across the lake*.);
- Choose tenses accurately and mostly consistently;
- Ensure that subject and verb agree when using singular and plural nouns in a sentence;
- Identify the active and passive voice in terms of sentence structure; identify modal verbs to express future time and possibility (e.g. *I might go to the park. They should be home soon*.);
- Identify, form and expand contractions accurately;
- Select appropriate synonyms and antonyms for a wide range of words;
- Use prefixes and suffixes to change the meaning of words, for example, to change words into different word classes;
- Recognise and use words from the same word families.

KS2 Grammar, punctuation & spelling 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in grammar, punctuation and spelling by the end of Key Stage Two.

Punctuation

- Demarcate sentences accurately, using capital letters and full stops, question marks or exclamation marks as appropriate;
- Use commas to mark clauses or phrases, including fronted adverbials, (eg: *The cottage, which had a blue door, looked warm and cosy. Despite these facts, people choose to eat unhealthy food*.) but they may not be able to use them consistently;
- Use inverted commas to denote speech and place these correctly in relation to internal punctuation;
- Use apostrophes correctly for omission and singular possession, and mostly accurately for plural possession;
- Identify where punctuation is used to indicate parenthesis;
- Identify colons, semi-colons, single dashes and hyphens but may not be able to use them consistently.

Spelling

- Spell accurately in general, including polysyllabic words that conform to regular patterns and some common exceptions to these, and less common prefixes and suffixes, for example *ir-*, *il-*, *-cian*, *-ous*;
- Spell or select the correct forms of common homophones; and
- Draw on their phonological, morphological and lexical awareness to apply the common rules and patterns and spell correctly a wide range of words, including those set out in statutory Appendix 1 of the 2014 national curriculum.

Key Assessment Criteria: *Being a writer*

A year 1 writer		
Transcription <u>Spelling</u> • I can identify known phonemes in unfamiliar words. • I can use syllables to divide words when spelling. • I use what I know about alternative phonemes to narrow down possibilities for accurate spelling. • I can use the spelling rule for adding 's' or 'es' for verbs in the 3rd person singular. • I can name all the letters of the alphabet in order. • I can use letter names to show alternative spellings of the same phoneme. <u>Handwriting</u> • I can sit correctly at a table, holding a pencil comfortable and correctly. • I can form lower case letters in the correct direction, starting and finishing in the right place. • I can form capital letters and digits 0-9.	**Composition** • I can compose a sentence orally before writing it. • I can sequence sentences in chronological order to recount and event or experience. • I can re-read what I have written to check that it makes sense. • I leave spaces between words. • I know how the prefix 'un' can be added to words to change meaning. • I can use the suffixes 's', 'es', 'ed', and 'ing' within my writing.	**Grammar and punctuation** <u>Sentence structure</u> • I can combine words to make a sentence. • I can join two sentences using 'and'. <u>Text structure</u> • I can sequence sentences to form a narrative. <u>Punctuation</u> • I can separate words using finger spaces. • I can use capital letters to start a sentence. • I can use a full stop to end a sentence. • I can use a question mark. • I can use an exclamation mark. • I can use capital letters for names. • I can use 'I'.

Key Assessment Criteria: *Being a writer*

A year 2 writer		
Transcription <u>Spelling</u> • I can segment spoken words into phonemes and record these as graphemes. • I can spell words with alternatives spellings, including a few common homophones. • I can spell longer words using suffixes such as 'ment', 'ness', 'ful', 'less', 'ly'. • I can use my knowledge of alternative phonemes to narrow down possibilities for accurate spelling. • I can identify phonemes in unfamiliar words and use syllables to divide words. <u>Handwriting</u> • I can form lower-case letters of the correct size relative to one another. • I can begin to use some of the diagonal and horizontal strokes needed to join letters. • I show that I know which letters are best left unjoined. • I use capital letters and digits of the correct size, orientation and relationship to one another and to lower case letters. • I use spacing between words that reflects the size of the letters.	**Composition** • I can write narratives about personal experiences and those of others, both real and fictional. • I can write for different purposes, including real events. • I can plan and discuss the content of writing and record my ideas. • I am able to orally rehearse structured sentences or sequences of sentences. • I can evaluate my own writing independently, with friends and with an adult. • I can proof-read to check for errors in spelling, grammar and punctuation.	**Grammar and punctuation** <u>Sentence structure</u> • I can use subordination and co-ordination. • I can use expanded noun phrases. • I can say how the grammatical patterns in a sentence indicate its function. <u>Text structure</u> • I consistently use the present tense and past tense correctly. • I can use the progressive forms of verbs in the present and past tense. <u>Punctuation</u> • I use capital letters for names of people, places, day of the week and the personal pronoun 'I'. • I correctly use question marks and exclamation marks, • I can use commas to separate items in a list. • I can use apostrophes to show where letters are missing and to mark singular possession in nouns.

Key Assessment Criteria: *Being a writer*

A year 3 writer		
Transcription <u>Spelling</u> • I can spell words with additional prefixes and suffixes and understand how to add them to root words. • I recognise and spell homophones. • I can use the first two or three letters of a word to check its spelling in a dictionary. • I can spell words correctly which are in a family. • I can spell the commonly mis-spelt words from the Y3/4 word list. • I can identify the root in longer words. <u>Handwriting</u> • I use the diagonal and horizontal strokes that are needed to join letters. • I understand which letters should be left unjoined.	**Composition** • I can discuss models of writing, noting its structure, grammatical features and use of vocabulary. • I can compose sentences using a wider range of structures. • I can write a narrative with a clear structure, setting, characters and plot. • I can write non-narrative using simple organisational devices such as headings and sub-headings. • I can suggest improvements to my own writing and that of others. • I can make improvements to grammar, vocabulary and punctuation. • I use a range of sentences with more than one clause by using a range of conjunctions. • I use the perfect form of verbs to mark the relationship of time and cause. • I can proof-read to check for errors in spelling and punctuation.	**Grammar and punctuation** <u>Sentence structure</u> • I can express time, place and cause by using conjunctions, adverbs and prepositions. <u>Text structure</u> • I am starting to use paragraphs. • I can use headings and sub headings. • I can use the present perfect form of verbs instead of the simple past. <u>Punctuation</u> • I can use inverted commas to punctuate direct speech.

Key Assessment Criteria: *Being a writer*

A year 4 writer		
Transcription <u>Spelling</u> • I can spell words with prefixes and suffixes and can add them to root words. • I can recognise and spell homophones. • I can use the first two or three letters of a word to check a spelling in a dictionary. • I can spell the commonly mis-spelt words from the Y3/4 word list. <u>Handwriting</u> • I can use the diagonal and horizontal strokes that are needed to join letters. • I understand which letters should be left unjoined. • My handwriting is legible and consistent; down strokes of letters are parallel and equidistant; lines of writing are spaced sufficiently so that ascenders and descenders of letters do not touch.	**Composition** • I can compose sentences using a range of sentence structures. • I can orally rehearse a sentence or a sequence of sentences. • I can write a narrative with a clear structure, setting and plot. • I can improve my writing by changing grammar and vocabulary to improve consistency. • I use a range of sentences which have more than one clause. • I can use appropriate nouns and pronouns within and across sentences to support cohesion and avoid repetition. • I can use direct speech in my writing and punctuate it correctly.	**Grammar and punctuation** <u>Sentence structure</u> • I can use noun phrases which are expanded by adding modifying adjectives, nouns and preposition phrases. • I can use fronted adverbials. <u>Text structure</u> • I can write in paragraphs. • I make an appropriate choice of pronoun and noun within and across sentences. <u>Punctuation</u> • I can use inverted commas and other punctuation to indicate direct speech. • I can use apostrophes to mark plural possession. • I use commas after fronted adverbials.

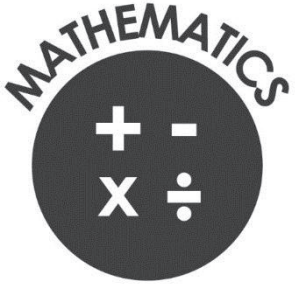
Key Assessment Criteria: *Being a writer*

A year 5 writer		
Transcription <u>Spelling</u> • I can form verbs with prefixes. • I can convert nouns or adjectives into verbs by adding a suffix. • I understand the rules for adding prefixes and suffixes. • I can spell words with silent letters. • I can distinguish between homophones and other words which are often confused. • I can spell the commonly mis-spelt words from the Y5/6 word list. • I can use the first 3 or 4 letters of a word to check spelling, meaning or both in a dictionary. • I can use a thesaurus. • I can use a range of spelling strategies. <u>Handwriting</u> • I can choose the style of handwriting to use when given a choice. • I can choose the handwriting that is best suited for a specific task.	**Composition** • I can discuss the audience and purpose of the writing. • I can start sentences in different ways. • I can use the correct features and sentence structure matched to the text type we are working on. • I can develop characters through action and dialogue. • I can establish a viewpoint as the writer through commenting on characters and events. • I can use grammar and vocabulary to create an impact on the reader. • I can use stylistic devices to create effects in writing. • I can add well chosen detail to interest the reader. • I can summarise a paragraph. • I can organise my writing into paragraphs to show different information or events.	**Grammar and punctuation** <u>Sentence structure</u> • I can use relative clauses. • I can use adverbs or modal verbs to indicate a degree of possibility. <u>Text structure</u> • I can build cohesion between paragraphs. • I can use adverbials to link paragraphs. <u>Punctuation</u> • I can use brackets, dashes and commas to indicate parenthesis. • I can use commas to clarify meaning or avoid ambiguity.

Key Assessment Criteria: *Being a writer*

A year 6 writer		
Transcription <u>Spelling</u> • I can convert verbs into nouns by adding a suffix. • I can distinguish between homophones and other words which are often confused. • I can spell the commonly mis-spelt words from the Y5/6 word list. • I understand that the spelling of some words need to be learnt specifically. • I can use any dictionary or thesaurus. • I use a range of spelling strategies. <u>Handwriting</u> • I can choose the style of handwriting to use when given a choice. • I can choose the handwriting that is best suited for a specific task.	**Composition** • I can identify the audience for and purpose of the writing. • I can choose the appropriate form and register for the audience and purpose of the writing. • I use grammatical structures and features and choose vocabulary appropriate to the audience, purpose and degree of formality to make meaning clear and create effect. • I use a range of sentence starters to create specific effects. • I can use developed noun phrases to add detail to sentences. • I use the passive voice to present information with a different emphasis. • I use commas to mark phrases and clauses. • I can sustain and develop ideas logically in narrative and non-narrative writing. • I can use character, dialogue and action to advance events in narrative writing. • I can summarise a text, conveying key information in writing.	**Grammar and punctuation** <u>Sentence structure</u> • I can use the passive voice. • I vary sentence structure depending whether formal or informal. <u>Text structure</u> • I can use a variety of organisational and presentational devices correct to the text type. • I write in paragraphs which can clearly signal a change in subject, time, place or event. <u>Punctuation</u> • I can use the semi-colon, colon and dash. • I can use the colon to introduce a list and semi-colon within lists. • I can use a hyphen to avoid ambiguity.

Key Assessment Criteria



Being a mathematician

The key assessment criteria for mathematics have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as mathematicians.

There are two sets of assessment criteria for mathematics:

1. Full version
2. Consolidated version (may be more helpful for sharing with parents/carers)

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

This section also includes the 'expected standard' as outlined in preparation for revised statutory assessment/testing from 2016.

Coverage within the mathematics National Curriculum

Department for Education

	Number and place value	Addition and subtraction	Multiplication and division	Addition, subtraction, multiplication and division	Fractions	Fractions, including decimals	Fractions, including decimals and percentages	Ratio and proportion	Algebra	Measurement	Geometry – properties of shape	Geometry – position and direction	Statistics
Yr 1	x	x	x		x					x	x	x	
Yr 2	x	x	x	x	x					x	x	x	x
Yr 3	x	x	x		x					x	x		x
Yr 4	x	x	x			x				x	x	x	x
Yr 5	x	x	x				X			x	x	x	x
Yr 6	x			x		x	x	x	x	x	x	x	x

What the National Curriculum requires in mathematics at Y1

Department for Education

Number and place value
- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words.

Number – addition and subtraction
- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems

Number – multiplication and division
- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Number fractions
- recognise, find and name a half as one of two equal parts of an object, shape or quantity
- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Number

Measurement
- compare, describe and solve practical problems for:
  - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
  - mass/weight [for example, heavy/light, heavier than, lighter than]
  - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
  - time [for example, quicker, slower, earlier, later]
- measure and begin to record the following:
  - lengths and heights
  - mass/weight
  - capacity and volume
  - time (hours, minutes, seconds)
- recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- recognise and use language relating to dates, including days of the week, weeks, months and years
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Measurement

Geometry – properties of shapes
- recognise and name common 2-D and 3-D shapes, including:
  - 2-D shapes [for example, rectangles (including squares), circles and triangles]
  - 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]

Geometry – position and direction
- describe position, direction and movement, including whole, half, quarter and three-quarter turns.

Geometry

What the National Curriculum requires in mathematics at Y2

Department for Education

Number

Number and place value
- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use <, > and = signs
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems

Number – addition and subtraction
- solve problems with addition and subtraction:
  - using concrete objects and pictorial representations, including those involving numbers, quantities and measures
  - applying their increasing knowledge of mental and written methods
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
  - a two-digit number and ones
  - a two-digit number and tens
  - two two-digit numbers
  - adding three one-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Number – multiplication and division
- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Fractions
- recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity
- write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2

Measurement

Measurement
- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using >, < and =
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day.

Geometry

Geometry – properties of shapes
- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid]
- compare and sort common 2-D and 3-D shapes and everyday objects.

Geometry – position and direction
- 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).

Statistics

Statistics
- 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.

What the National Curriculum requires in mathematics at Y3

Department for Education

Number

Number and place value
- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- compare and order numbers up to 1000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1000 in numerals and in words
- solve number problems and practical problems involving these ideas.

Number – addition and subtraction
- add and subtract numbers mentally, including:
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Number – multiplication and division
- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions
- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- recognise and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole [for example, 75 + 71 = 76]
- compare and order unit fractions, and fractions with the same denominators
- solve problems that involve all of the above.

Measurement

Measurement
- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- measure the perimeter of simple 2-D shapes
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
- know the number of seconds in a minute and the number of days in each month, year and leap year
- compare durations of events [for example to calculate the time taken by particular events or tasks].

Geometry

Geometry – properties of shapes
- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- recognise angles as a property of shape or a description of a turn
- identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
- identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

Statistics

Statistics
- interpret and present data using bar charts, pictograms and tables
- solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

What the National Curriculum requires in mathematics at Y4

Department for Education

Number

Number and place value
- count in multiples of 6, 7, 9, 25 and 1000
- find 1000 more or less than a given number
- count backwards through zero to include negative 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.

Number – addition and subtraction
- 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.

Number – multiplication and division
- 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.

Fractions, including decimals
- recognise and show, using diagrams, families of common equivalent fractions
- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
- add and subtract fractions with the same denominator
- recognise and write decimal equivalents of any number of tenths or hundredths
- recognise and write decimal equivalents to ¼, ½, ¾
- 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.

Measurement

Measurement
- 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.

Geometry

Geometry – properties of shapes
- 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.

Geometry – position and direction
- describe positions on a 2-D grid as coordinates in the first quadrant
- describe movements between positions as translations of a given unit to the left/right and up/down
- plot specified points and draw sides to complete a given polygon.

Statistics

Statistics
- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

What the National Curriculum requires in mathematics at Y5

Department for Education

Number and place value
- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100000
- solve number problems and practical problems that involve all of the above
- read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Number – addition and subtraction
- add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- add and subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Number – multiplication and division
- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- establish whether a number up to 100 is prime and recall prime numbers up to 19
- multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- multiply and divide numbers mentally drawing upon known facts
- divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})
- solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Number

Fractions, including decimals and percentages
- compare and order fractions whose denominators are all multiples of the same number
- identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number
- add and subtract fractions with the same denominator and denominators that are multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- read and write decimal numbers as fractions [for example, 0.71 = 71/100]
- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- round decimals with two decimal places to the nearest whole number and to one decimal place
- read, write, order and compare numbers with up to three decimal places
- solve problems involving number up to three decimal places
- recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

Number

Measurement
- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes
- estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
- solve problems involving converting between units of time
- use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

Measurement

Geometry – properties of shapes
- identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
- draw given angles, and measure them in degrees (°)
- identify:
  - angles at a point and one whole turn (total 360°)
  - angles at a point on a straight line and ½ turn (total 180°)
  - other multiples of 90°
- use the properties of rectangles to deduce related facts and find missing lengths and angles
- distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Geometry – position and direction
- identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Geometry

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

Statistics

What the National Curriculum requires in mathematics at Y6

Department for Education

Number

Number and place value
- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero
- solve number and practical problems that involve all of the above.

Number – addition, subtraction, multiplication and division
- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Fractions, including decimals and percentages
- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions > 1
- add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- multiply simple pairs of proper fractions, writing the answer in its simplest form
- divide proper fractions by whole numbers
- associate a fraction with division and calculate decimal fraction equivalents for a simple fraction
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers
- use written division methods in cases where the answer has up to two decimal places
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Ratio & proportion

Ratio and proportion
- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra

Algebra
- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables.

Measurement

Measurement

solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places

convert between miles and kilometres

recognise that shapes with the same areas can have different perimeters and vice versa

recognise when it is possible to use formulae for area and volume of shapes

calculate the area of parallelograms and triangles

calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].

Geometry

Geometry – properties of shapes
- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Geometry – position and direction
- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Statistics

Statistics
- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average.

KS1 Mathematics 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in mathematics by the end of Key Stage One.

Number

- Count in multiples of 2, 5 and 10, to 100, forwards and backwards
- Count forward in multiples of 3, to 18
- Count in steps of 10, forward and backwards (e.g. 97, 87…)
- Read & write numbers to at least 100 in numerals, and phonetically attempts to write numbers to 100 in words
- Use place value in whole numbers up to 100 to compare and order numbers, sometimes using < and > signs correctly
- Identify, represent and estimate within a structural environment (e.g. estimate 33 on a number line)
- Use place value and number facts to solve problems (e.g. 60 – XX = 20)
- Recall and use addition and subtraction facts
- Subtract two simple 2-digit numbers, which do not involve bridging ten (e.g. 36-24)
- Add three 1-digit numbers, where they use known addition or doubling facts
- Add and subtract numbers using concrete objects and pictorial representations, including:
    - a 2-digit number and ones
    - a 2-digit number and tens
    - adding two 2-digit numbers
    - adding three 1-digit numbers
- Use inverse operations to solve missing number problems for addition and subtraction
- Solve simple 2-step problems with addition and subtraction
- Recall and use multiplication and division facts for the x10 table using the appropriate signs
- Recognise odd and even numbers
- Solve simple problems involving multiplication and division
- Know that addition and multiplication of two small numbers can be done in any order (commutative) and subtraction of one number from another cannot
- Recognise and find half of a set of objects or a quantity and begin to find 1/3 or 1/4 of a small set of objects with support
- Recognise, find and name fractions ½, 1/3, ¼, 2/4, and ¾ of a shape
- Recognise the equivalence of two quarters and one half in practical contexts

KS1 Mathematics 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in mathematics by the end of Key Stage One.

Measurement

- Compare and order lengths, mass, volume/capacity
- Choose and use appropriate standard units to measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (l/ml) to the nearest appropriate unit using rules, scales, thermometers and measuring vessels and begin to make good estimates.
- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value and find different combinations of coins to equal the same amounts of money
- Recognise, tell and write the times: o'clock; half past and quarter past and are beginning to recognise quarter to the hour; draw hands on a clock face to show half past and o'clock times
- Solve simple problems in a practical context involving addition and subtraction of money using the same unit, including giving change

Geometry

- compare and sort common 2-D shapes (e.g. semi-circle, rectangle and regular polygons such as pentagon, hexagon and octagon) and everyday objects, identifying and describing their properties (e.g. the number of sides or vertices, and are beginning to recognise symmetry in a vertical line)
- compare and sort common 3-D shapes (e.g. cone, cylinder, triangular prism, pyramid) and everyday objects, identifying and describing their properties (e.g. flat / curved surfaces, and beginning to count number of faces and vertices correctly)
- identify 2-D shapes on the surface of 3-D shapes and images of them (e.g. a circle on a cylinder and a triangle on a pyramid)
- order and arrange combinations of mathematical objects in patterns (e.g. continue a repeating pattern)
- use mathematical vocabulary to describe position, direction (e.g. left and right) and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter and half turns

KS1 Mathematics 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in mathematics by the end of Key Stage One.

Statistics

- interpret simple pictograms (where the symbols show one to one correspondence), tally charts, block diagrams (where the scale is divided into ones, even if only labelled in multiples of two) and simple tables
- answer questions by counting the number of objects in each category and sorting the categories by quantity
- answer questions about totalling and begin to compare simple categorical data (e.g. when the pictures or blocks are adjacent)

Solve problems, communicate and reason mathematically

- solve problems by applying their mathematics in a range of contexts (including money and measures, geometry and statistics) using the content described above; use and interpret mathematical symbols and diagrams; and begin to communicate their reasoning; for example:
    - use place value and number facts to solve problems (e.g. 40 + XX = 70)
    - use inverse operations to solve missing number problems for addition and subtraction (e.g. There were some people on a bus, six get off leaving seventeen people on the bus. How many were on the bus to start with?)
    - solve simple 2-step problems with addition and subtraction, which require some retrieval (e.g. There are 12 kittens in a basket, 6 jump out and only 2 jump back in. How many are in the basket now?)
    - solve simple problems involving multiplication and division (e.g. Ahmed buys 3 packs of apples. There are 4 apples in each pack. How many apples does he buy?)
    - solve problems with one or two computational steps using addition, subtraction, multiplication and division and a combination of these (e.g. Joe has 2 packs of 6 stickers; Mina gives him 2 more stickers. How many stickers does he have altogether?)
    - solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (e.g. Identify three coins with a total value of 24p or find the two items which cost exactly £1 altogether from a list such as: 70p, 40p, 50p and 30p)

KS2 Mathematics 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in mathematics by the end of Key Stage Two.

Number

- use place value in whole numbers up to 1 000 000 to compare and order numbers and are beginning to become confident with numbers up to 10 000 000
- round any whole number to the nearest power of ten
- use negative numbers in practical contexts such as temperature and calculate intervals across zero
- count forwards or backwards in steps of any whole number with one significant figure, e.g. 9, 20, 3000 to generate, describe and complete linear number sequences
- recognise and use multiples, factors, prime numbers less than 20 and square numbers up to 121 show evidence of using mental methods, including jottings where necessary to speed up the process, to add and subtract whole numbers with up to two significant figures (e.g. 95 + 36, 5700 − 2900)
- add and subtract whole numbers with more than four digits, using formal written methods where appropriate
- Use their understanding of place value to multiply and divide whole numbers and decimals with up to two decimal places by 10 or 100 (e.g. 1532 ÷ 100 = , XX ÷ 100 = 6.3)
- Multiply and divide whole numbers mentally drawing upon multiplication facts up to 12 × 12 and place value (e.g. 60 × 70) and begin to use these facts to work with larger numbers
- Multiply numbers with up to two digits by a two digit number using a formal written method and becoming more confident with multiplication with larger numbers; multiply and divide numbers with up to four digits by a single digit number using the formal written method and becoming more confident with two digit divisors
- Recognise and use equivalent fractions
- Recognise and use the equivalences between simple fractions, decimals and percentages and become more confident with calculating decimal fraction equivalents
- Find simple fractions and percentages of whole numbers and quantities
- Add and subtract fractions with the same denominator, using mixed numbers where appropriate for the context
- Add and subtract fractions with the same denominator and multiples of the same number and become more confident with more complex fraction calculations
- Add and subtract decimal numbers that have the same number of decimal places
- Multiply a one digit decimal number by a single digit number
- Use simple ratio to compare quantities
- Use simple formulae expressed in words (e.g. time needed to cook a chicken: allow 20 minutes plus 40 minutes per kilogram)
- Find possible values in missing number problems involving one or two unknowns (e.g. Ben thinks of two numbers: the sum of the two numbers is 10: multiplied together they make 24: What are Ben's numbers?)

KS2 Mathematics 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in mathematics by the end of Key Stage Two.

Measurement

- Read, write and convert time between analogue (including clock faces using Roman numerals) and digital 12 and 24 hour clocks, using am and pm where necessary
- Calculate the duration of an event using appropriate units of time (e.g. A film starts at 6:45pm and finishes at 8:05pm. How long did it last?)
- Convert between 'adjacent' metric units of measure for length, capacity and mass (e.g. 1.2 kg = 1200 g; how many 200 ml cups can be filled from a 2 litre bottle?; write 605 cm in metres)
- Find the perimeter of compound shapes when all side lengths are known or can be easily determined (e.g. a simple shape made from two identical rectangles joined together to make an L-shape with given dimensions of the rectangle)
- Estimate the area of irregular shapes by counting squares (including half squares and fractions of squares that join with others to make whole squares)
- Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes by counting squares

Geometry

- Compare and classify 3D and 2D shapes based on their properties (e.g. for 2–D shapes: parallel sides, length of sides, type and size of angles, reflective symmetry, regular / irregular polygons; for 3–D shapes: faces, vertices and edges)
- Recognise, describe simple 3D shapes, including using nets and other 2D representations
- Complete simple shapes using given lengths, such as 7.5cm, (accurate to +/ −2 mm) and acute angles that are multiples of 5° (accurate to +/- 2°)
- Know and use the facts that angles at a point sum to 360°, angles at a point on a straight line sum to 180° and angles in a triangle sum to 180° (e.g. calculate the base angles of an isosceles triangle where the other angle is 110°) and identify other multiples of 90°
- Identify, describe and represent the position of a shape following a reflection or translation
- Describe positions on a 2–D co-ordinate grid using axes with equal scales in the first quadrant (in the context of number or geometry) and use co-ordinates to complete a given rectangle; becoming more confident in all four quadrants

KS2 Mathematics 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in mathematics by the end of Key Stage Two.

Statistics

- Complete, read and interpret information presented in tables and bar charts (e.g. find the difference between two bars showing temperatures, where one is 20°C and the other is 13°C, on a scale labelled in multiples of 5)
- Interpret line graphs (e.g. beginning to find the difference between two temperatures on a line graph, where one is 20°C and the other is 13°C, on a scale labelled in multiples of 5) and simple pie charts (e.g. a pie chart cut into eight pieces for favourite fruit using whole numbers for each section)
- Calculate the mean as an average for simple sets of discrete data (e.g. find the mean mass of three parcels weighing 5kg, 3kg and 10kg)

Solving problems and reason mathematically

- Develop their own strategies to solve problems by applying their mathematics to a variety of routine and non-routine problems, in a range of contexts (including money and measures, geometry and statistics) using the content described above
- Begin to reason mathematically making simple generalisations, using mathematical language and searching for solutions by trying out ideas of their own
- Use and interpret mathematical symbols and diagrams, and present information and results in a clear and organised way; for example:
    - derive strategies to solve problems with two or three computational steps using addition, subtraction, multiplication and division and a combination of these (e.g. extract and add prices from a table and calculate change, or solve problems such as 'Jason bought some bags of green apples (6 for 75p) and some bags of red apples (10 for 90p). He spent £4.20. How many bags of each type of apples did he buy?')
    - solve problems involving numbers with up to two decimal places (e.g. find the two numbers which sum to 10 from this list: 0.01, 0.11, 1.01, 9.09, 9.9, 9.99)
    - select appropriate strategies when calculating depending on the numbers involved
    - use rounding and estimation to check their answers and determine, in the context of the problem, appropriate levels of accuracy
    - identify simple patterns and relationships, and make simple generalisations. They can draw their own conclusions and explain their reasoning in simple contexts using mathematical language (e.g. an explanation to satisfy statements such as *'If you add a two-digit number to a two-digit number you cannot get a four-digit number'*

Key Assessment Criteria: *Being a mathematician (full version)*

A year 1 mathematician

Number and place value
- I can count to and across 100, forward and backwards ,beginning with 0 or 1 from any number.
- I can count in multiples of 2, 5 and 10.
- I can count, read and write numbers to 100 in numerals.
- I can say what is one more or one less than any number.
- I can read and write numbers from 1 to 20 in numerals and words.
- I can identify and represent numbers using objects and pictorial representations including the number line and use the language of: equal to, more than, less than (fewer), most least

Calculations
- I can represent and use number bonds and related subtraction facts to 20.
- I can add and subtract 1-digit and 2-digit numbers to 20, including zero.
- I can read, write and interpret mathematical statements involving addition, subtraction and equals signs.
- I can solve one-step problems that involve addition and subtraction, using objects and pictorial representations.
- I can solve missing number problems.
- I can solve one-step problems involving multiplication and division, by using concrete objects, pictorial representations and arrays.

Fractions
- I can recognise, find and name a half of an object, shape or quantity.
- I can recognise, find and name a quarter of an object, shape or quantity.

Measurement
- I can compare, describe and solve practical problems for lengths and heights; mass/weight; capacity and volume; and time.
- I can measure and begin to record lengths and heights; mass/weight; capacity and volume; and time.
- I recognise and know the value of different denominations of coins and notes.
- I can tell the time to the hour.
- I can tell the time to half past the hour.
- I can draw hands on a clock face to show these times.
- I can sequence events in chronological order using language.
- I recognise and use language relating to dates, including days, weeks, months and years

Geometry – properties of shapes
- I recognise and can name common 2D shapes (rectangles, including squares, circles and triangles.
- I recognise and can name common 3D shapes (cuboids, including cubes, pyramids and spheres.

Geometry – position and direction
- I can describe position, directions and movement, including half, quarter and three-quarter turns.

Key Assessment Criteria: *Being a mathematician (full version)*

A year 2 mathematician

Number and place value
- I can count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.
- I can read and write numbers to at least 100 in numerals and in words.
- I can compare and order numbers from 0 up to 100; using < > = signs.
- I recognise the place value of each digit in a 2-digit number.
- I can identify, represent and estimate numbers using different representations, including the number line.
- I can use place value and number facts to solve problems.

Calculations
- I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- I can add and subtract mentally, including:
    - A 2-digit number and ones
    - A 2-digit number and tens
    - Two 2-digit numbers
    - Adding three 1-digit numbers
- I can add and subtract numbers using concrete objects and pictorial representations, including:
    - A 2-digit number and ones
    - A 2-digit number and tens
    - Two 2-digit numbers
    - Adding three 1-digit numbers
- I recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
- I can solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.
- I can solve problems with addition and subtraction applying my increasing knowledge of mental and written methods.
- I can recall and use multiplication and division facts for the 2, 5 and 10x tables, including recognising odd and even numbers.
- I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs.
- I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.
- I can show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
- I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Fractions
- I recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity.
- I can write simple fractions.
- I recognise the equivalence of 2/4 and 1/2.

Measurement
- I can compare and order lengths, mass, volume/capacity and record the results using > < and =.
- I can choose and use standard units to estimate and measure length/height in any direction in m and cm using rulers.
- I can choose and use standard units to estimate and measure mass in kg and g using scales.
- I can choose and use standard units to estimate and measure temperature in °C using thermometers.
- I can choose and use standard units to estimate and measure capacity in l and ml using measuring vessels.
- I recognise and use symbols for £ and p and combine amounts to make a particular value.
- I can find different combinations of coins that equal the same amount of money.
- I can tell and write the time to five minutes, including quarter to/past and draw the hands on a clock face to show these times.
- I can compare and sequence intervals of time.
- I know the number of minutes in an hour.
- I know the number of hours in a day.
- I can solve simple problems in a practical context involving addition and ssubtraction of money of the same units, including giving change.

Geometry – properties of shapes
- I can compare and sort common 2D shapes and everyday objects.
- I can compare and sort common 3D shapes and everyday objects.
- I can identify and describe the properties of 2D shapes, including the number of sides and line of symmetry in a vertical line.
- I can identify and describe the properties of 3D shapes including the number of edges, vertices and faces.
- I can identify 2D shapes on the surface of 3D shapes.

Geometry – position and direction
- I can order and arrange combinations of mathematical objects in patterns and sequences.
- I can 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).

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

Key Assessment Criteria: *Being a mathematician (full version)*

A year 3 mathematician

Number, place value, approximation and estimation/rounding

- I can count from 0 in multiples of 4, 8, 50 and 100.
- I can compare and order numbers up to 1,000.
- I can read and write numbers to 1,000 in numerals and words.
- I can find 10 or 100 more or less than a given number.
- I can recognise the place value of each digit in a 3-digit number.
- I can identify, represent and estimate numbers using different representations.
- I can solve number problems and practical problems using above.

Calculations

- I can add and subtract mentally, including:
    - A 3-digit number and ones
    - A 3-digit number and tens
    - A 3-digit number and hundreds
- I can add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
- I can estimate the answer to a calculation and use inverse operation to check answers.
- I can solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
- I can recall and use multiplication and division facts for the 3, 4 and 8x tables.
- I can write and calculate mathematical statements for multiplication and division using the multiplication tables, including for 2-digit numbers, using mental and progressing to formal written methods.
- I can solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions, decimals and percentages

- I can count up and down in tenths.
- I recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10.
- I recognise and can find and write factions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
- I can compare and order unit fractions and factions with the same denominators.
- I can add and subtract factions with the same denominator within one whole.
- I can solve problems involving the above.

Measurement

- I can compare lengths using m, cm &mm.
- I can compare mass using kg & g.
- I can compare volume/capacity using l & ml.
- I can measure lengths using m, cm & mm.
- I can measure mass using kg & g.
- I can measure volume/capacity using l & ml.
- I can add and subtract lengths using m, cm & mm.
- I can add and subtract mass using kg & g.
- I can add and subtract volume/capacity using l & ml.

- I can tell and write the time from an analogue clock (12 hour clock).
- I can tell and write the time from an analogue clock (24 hour clock).
- I can tell and write the time from an analogue clock (Roman numerals).
- I can estimate and read time with increasing accuracy to the nearest minute.
- I can record and compare time in terms of seconds, minutes and hours.
- I can use the following vocabulary: o'clock, am, pm, morning, afternoon, noon & midnight.
- I know the number of seconds in a minute.
- I know the number of days in each month, year and leap year.
- I can compare the duration of events.

- I can measure the perimeter of simple 2D shapes.

- I can add and subtract amounts of money to give change, using both £ and p in a practical context.

Geometry – properties of shapes

- I can identify horizontal, vertical lines and pairs of perpendicular and parallel lines.
- I can draw 2D shapes.
- I can make 3D shapes using modelling materials.
- I recognise 3D shapes in different orientations and describe them.
- I recognise that angles are a property of shape or a description of a turn.
- I can identify right angles.
- I recognise that two right angles make a half-turn & three make a three quarter turn.
- I can identify whether angles are greater than or less than a right angle.

Statistics

- I can interpret and present data using bar charts, pictograms and tables.
- I can solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables.

Key Assessment Criteria: *Being a mathematician (full version)*

A year 4 mathematician

Number, place value, approximation and estimation/rounding
- I can count in multiples of 6, 7, 9, 25 and 1,000.
- I can order and compare numbers beyond 1,000.
- I can find 1,000 more or less than a given number.
- I recognise the place value of each digit in a 4-digit number.
- I can read Roman numerals to 100 and know that over time the numeral system changed to include the concept of zero and place value.
- I can identify, represent and estimate numbers using different representations.
- I can round any number to the nearest 10, 100 or 1,000.
- I can count backwards through zero to include negative numbers.
- I can solve number and practical problems with the above (involving increasingly large numbers).

Calculations
- I can add and subtract numbers with up to 4-digits using the formal written methods of columnar addition and subtraction.
- I can estimate and use inverse operations to check answers in a calculation.
- I can solve addition and subtraction 2-step problems in contexts, deciding which operations and methods to use and why.
- I an recall multiplication and division facts up to 12x12.
- I can 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.
- I recognise and use factor pairs and commutativity in mental calculations.
- I can multiply 2-digit numbers by a 1-digit number using formal written layout.
- I can solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Fractions, decimals and percentages
- I an count up and down in hundredths.
- I recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.
- I recognise and show using diagrams, families of common equivalent fractions.
- I can add and subtract factions within the same denominator.
- I recognise and write decimal equivalents to 1/4, 1/2 and ¾.
- I recognise and write decimal equivalents of any number of tenths or hundredths.
- I can round decimals with one decimal place to the nearest whole number.
- I can compare numbers with the same number of decimal places up to 2 decimal places.
- I can find the effect of dividing a 1-digit or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.
- I can solve problems involving increasingly harder factions and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- I can solve simple measure and money problems involving fractions and decimals to 2 decimal places.

Measurement
- I can compare different measures, including money in £ and p.
- I can estimate different measures, including money in £ and p.
- I can calculate different measures. Including money in £ and p.

- I can read, write and convert time between analogue and digital 12 hour clocks.
- I can read, write and convert time between analogue and digital 24 hour clocks.
- I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

- I can convert between different units of measurements
- I can measure and calculate the perimeter of a rectilinear figure in cm and m.
- I can find the area of rectilinear shapes by counting squares.
- I can calculate different measures

Geometry – properties of shapes
- I can compare and classify geometric shapes, including quadrilateral and triangles based on their properties and sizes.
- I can identify lines of symmetry in 2D shapes presented in different orientations.
- I can complete a simple symmetric figure with respect to a specific line of symmetry,
- I can identify acute and obtuse angles and compare and order angles up to two right angles by size.

Geometry – position and direction
- I can describe movements between positions as translations of a given unit to the left/right and up/down.
- I can describe positions on a 2D grid as coordinates in the first quadrant.
- I can plot specified points and draw sides to complete a given polygon.

Statistics
- I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Key Assessment Criteria: *Being a mathematician (full version)*

A year 5 mathematician

Number, place value, approximation and estimation/rounding
- I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
- I can read, write, order and compare numbers to at least 1,000,000.
- I can determine the value of each digit in numbers up to 1,000,000.
- I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.
- I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 and 100000.
- I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
- I can solve number problems and practical problems with the above.

Calculations
- I can add and subtract numbers mentally with increasingly large numbers.
- I can add and subtract whole numbers with more than 4 digits, including using formal written methods.
- I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- I can identify multiples and factors, including finding all factor pairs or a number and common factor pairs of two numbers.
- I use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
- I can establish whether a number up to 100 is prime and recall prime numbers up to 19.
- I recognise and use square numbers and cube numbers, and the notation for squared and cubed.
- I can multiply and divide numbers mentally drawing on known facts.
- I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- I can multiply numbers up to 4 digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.
- I can divide numbers up to 4 digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context.
- I can solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.
- I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
- I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates.

Fractions, decimals and percentages
- I can recognise mixed numbers and improper fractions and convert from one form to the other.
- I can write mathematical statements >1 as a mixed number.
- I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- I can compare and order fractions whose denominators are multiples of the same number.
- I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- I can read and write decimal numbers as fractions.
- I recognise and can use thousandths and relate them to tenths, hundredths and decimal equivalents.
- I can round decimals with 2 decimal places to the nearest whole number and 1 decimal place.
- I can read, write, order and compare numbers with up to 3 decimal places.
- I can solve problems involving numbers up to 3 decimal places.
- I recognise the percent symbol and understand that percent relates to 'number parts per hundred'.
- I can write percentages as a fraction with denominator hundred, and as a decimal.
- I can solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator or a multiple of 10 or 25.

Measurement
- I can solve problems involving converting between units of time.
- I can convert between different units of metric measure.
- I understand and use approximate equivalences between metric units and common imperial units, such as inches, pounds and pints.
- I can measure and calculate the perimeter of composite rectilinear shapes in cm and m.
- I can calculate and compare the area of rectangles (incl squares), and including using standard units (cm^2 and cm^3) to estimate the area of irregular shapes.
- I can estimate volume and capacity.
- I can use all four operations to solve problems involving money using decimal notation, including scaling.

Geometry – properties of shapes
- I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
- I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- I can identify 3D shapes, including cubes and other cuboids, from 2D representations.
- I know angles are measured in degrees.
- I can estimate and compare acute, obtuse and reflex angles.
- I can identify angles at a point and one whole turn.
- I can identify angles at a point on a straight line and ½ a turn.
- I can identify other multiples of 90°.
- I can draw given angles and measure them in degrees.

Geometry – position and direction
- I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

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

Key Assessment Criteria: *Being a mathematician (full version)*

A year 6 mathematician

Number, place value, approximation and estimation/rounding
- I can read, write, order and compare numbers up to10,000,000.
- I can determine the value of each digit in numbers up to 10,000,000.
- I can round any whole number to a required degree of accuracy.
- I can use negative numbers in context, and calculate intervals across zero.
- I can solve number problems and practical problems with the above.

Calculations
- I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
- I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- I can identify common factors, common multiples and prime numbers.
- I can perform mental calculations, including with mixed operations and large numbers.
- I can multiply multi-digit numbers up to 4 digits by a 2 digit whole number using the formal written method of long multiplication.
- I can divide numbers up to 4 digits by a 2 digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.
- I can divide numbers up to 4 digits by a 2 digit number using the formal written method of short division where appropriate.
- I can solve problems involving addition, subtraction, multiplication and division.
- I can use my knowledge of the order of operations to carry out calculations involving the four operations.

Fractions, decimals and percentages
- I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.
- I can compare and order fractions, including fractions >1.
- I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
- I can multiply simple pairs of proper fractions, writing the answer in the simplest form.
- I can divide proper fractions by whole numbers.
- I can associate a fraction with division to calculate decimal fractions equivalents for a simple fraction.
- I can identify the value of each digit to 3 decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places.
- I can multiply 1-digit numbers with up to 2 decimal places by whole numbers.
- I can use written division methods in cases where the answer has up to 2 decimal places.
- I can solve problems which require answers to be rounded to specified degrees of accuracy.
- I an recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

Ratio and proportion
- I can solve problems involving the relative sizes of two quantities, where missing values can be found using integer multiplication and division facts.
- I can solve problems involving the calculation of percentages and the use of percentage comparisons.
- I can solve problems involving similar shapes where the scale factor is known or can be found.
- I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra
- I can express missing number problems algebraically.
- I can use a simple formulae.
- I can generate and describe linear number sequences.
- I can find pairs of numbers that satisfy an equation with two unknowns.
- I can enumerate possibilities of combinations of two variables.

Measurement
- I can use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation of up to 3 decimal places.
- I can convert between miles and kilometres.
- I recognise that shapes with the same areas can have different perimeters and vice versa.
- I can calculate the area of parallelograms and triangles.
- I recognise when it is possible to use the formulae for the area of shapes.
- I can calculate, estimate and compare volume of cubes and cuboids, using standard units.
- I recognise when it is possible to use the formulae for the volume of shapes.
- I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.

Geometry – properties of shapes
- I can compare and classify geometric shapes based on the properties and sizes.
- I can describe simple 3D shapes.
- I can draw 2D shapes given dimensions and angles.
- I recognise and build simple 3D shapes, including making nets.
- I can find unknown angles in any triangles, quadrilaterals and regular polygons.
- I recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
- I can illustrate and name parts of circles, including radius, diameter and circumference.
- I know the diameter is twice the radius.

Geometry – position and direction
- I can draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes.
- I can describe positions on the full co-ordinate grid (all four quadrants).

Statistics
- I can interpret and construct pie charts and line graphs and use these to solve problems
- I can calculate and interpret the mean as an average.

Key Assessment Criteria: *Being a mathematician (consolidated)*

A year 1 mathematician	
Number	**Measurement and geometry**
• I can count reliably to 100. • I can count on and back in 1s, 2s, 5s and 10s from any given number up to 100. • I can write all numbers in words to 20. • I can say the number that is one more or one less than a number to 100. • I can recall all pairs of addition and subtraction number bonds to 20. • I can add and subtract 1-digit and 2-digit numbers to 20, including zero. • I know the signs + - =. • I can solve a missing number problem. • I can solve a one-step problem using addition and subtraction, using concrete objects and pictorial representations.	• I recognise all coins. • I recognise and can name the 2D shapes: circle, triangle, square and rectangle. • I recognise and can name the 3D shapes: cuboid, pyramid, sphere. • I can name the days of the week and months of the year. • I can tell the time to o'clock and half past the hour.

Key Assessment Criteria: *Being a mathematician (consolidated)*

A year 2 mathematician	
Number	**Measurement, geometry and statistics**
• I can read and write all numbers to at least 100 in numerals and words. • I recognise odd and even numbers to 100. • I can count in steps of 2, 3 and 5 from 0. • I recognise and can define the place value of each digit in a 2 digit number. • I can compare and order numbers from 0 to 100 using the < > and = signs. • I can name the fractions 1/3, 1/4, 1/2 and 3/4 and can find fractional values of shapes, lengths and numbers. • I can recall and use multiplication and division facts for the 2, 5 and 10x tables. • I can add and subtract a 2-digit number and ones. • I can add and subtract a 2-digit number and tens. • I can add and subtract two 2-digit numbers. • I can add three 1-digit numbers. • I can solve problems involving addition and subtraction. • I understand and can use commutivity in relation to addition, subtraction, multiplication and division.	• I can choose and use appropriate standard units to estimate length, height, temperature and capacity. • I can tell and write the time to 5 minute intervals. • I recognise and can use the symbols £ and p when solving problems involving addition and subtraction of money. • I can describe the properties of 2D and 3D shapes to include edges, vertices and faces. • I can interpret and construct pictograms, tally charts, block diagram and simple tables.

Key Assessment Criteria: *Being a mathematician (consolidated)*

A year 3 mathematician	
Number	**Measurement, geometry and statistics**
• I can compare and order numbers to 1000 and read and write numbers to 1000 in numerals and words. • I can count from 0 in multiples of 4, 8, 50 and 100. • I can recognise the value of each digit in a 3-digit number. • I understand and can count in tenths, and find the fractional value of a given set. • I can add and subtract fractions with a common denominator. • I can derive and recall multiplication facts for 3, 4 and 8x tables. • I can add and subtract mentally combinations of 1-digit and 2-digit numbers. • I can add and subtract numbers with up to 3-digits using formal written methods. • I can write and calculate mathematical statements for multiplication and vision using the 2x, 3x, 4x, 5x, 8x and 10x tables. • I can calculate 2-digit x 1-digit. • I can solve number problems using one and two step problems	• I can identify right angles and can compare other angles stating whether they are greater or smaller than a right angle. • I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines. • I can tell the time to the nearest minute and use specific vocabulary, including seconds, am & pm. • I can measure, compare, add and subtract using common metric measures. • I can solve one and two step problems using information presented in scaled bar charts, pictograms and tables.

Key Assessment Criteria: *Being a mathematician (consolidated)*

A year 4 mathematician	
Number	**Measurement, geometry and statistics**
• I can recall all multiplication facts to 12 x 12. • I can round any number to the nearest 10, 100 or 1000 and decimals with one decimal place to the nearest whole number. • I can count backwards through zero to include negative numbers. • I can compare numbers with the same number of decimal places up to 2-decimal places. • I can recognise and write decimal equivalents of any number of tenths or hundredths. • I can add and subtract with up to 4-decimal places using formal written methods of columnar addition and subtraction. • I can divide a 1 or 2-digit number by 10 or 100 identifying the value of the digits in the answer as units, tenths and hundredths. • I can multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout. • I can solve two step addition and subtraction problems in context. • I can solve problems involving multiplication.	• I can compare and classify geometrical shapes, including quadrilaterals and triangles, based on their properties and sizes. • I know that angles are measured in degrees and can identify acute and obtuse angles. • I can compare and order angles up to two right angles by size. • I can measure and calculate the perimeter of a rectilinear figure in cm and m. • I can read, write and convert between analogue and digital 12 and 24 hour times. • I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.

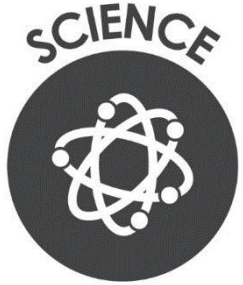
Key Assessment Criteria: *Being a mathematician (consolidated)*

A year 5 mathematician	
Number	**Measurement, geometry and statistics**
• I can count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000. • I recognise and use thousandths and relate then to tenths, hundredths and decimals equivalents. • I recognise mixed numbers and improper fractions and can convert from one to the other. • I can read and write decimal numbers as fractions. • I recognise the % symbol and understand percent relates to a number of parts per hundred. • I can write percentages as a fraction with denominator hundred and as a decimal fraction. • I can compare and add fractions whose denominators are all multiples of the same number. • I can multiply and divide numbers mentally drawing on known facts up to 12 x 12. • I can round decimals with 2dp to the nearest whole number and to 1dp. • I recognise and use square numbers and cube numbers; and can use the notation ^{2} and ^{3}. • I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. • I can multiply numbers up to 4-digit by a 1 or 2-digit number using formal written methods, including long multiplication for a 2-digit number. • I can divide numbers up to 4-digits by a 1-digit number. • I can solve problems involving multiplication and division where large numbers are used by decomposing them into factors. • I can solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why. • I can solve problems involving numbers up to 3dp.	• I know that angles are measured in degrees. • I can estimate and compare acute, obtuse and reflex angles. • I can draw given angles and measure them in degrees. • I can convert between different units of metric measures and estimate volume and capacity. • I can measure and calculate the perimeter of composite rectilinear shapes in cm and m. • I can calculate and compare the areas of squares and rectangles including using standards units (cm^2 and m^2). • I can solve comparison, sum and difference problems using information presented in a line graph.

Key Assessment Criteria: *Being a mathematician (consolidated)*

A year 6 mathematician	
Number	**Measurement, geometry and statistics**
• I can use negative numbers in context, and calculate intervals across zero. • I can round any whole number to a required degree of accuracy and solve problems which require answers to be rounded to a specific degree of accuracy. • I can solve problems involving the relative sizes of two quantities where the missing values can be found by using integer multiplication and division facts. • I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination. • I can solve problems involving the calculation of percentages. • I can multiply 1-digit numbers with up to two decimal places by whole numbers. • I can perform mental calculations, including with mixed operations with large numbers. • I can divide numbers up to 4-digits by a 2-digit whole number using formal written methods of long division and interpret remainder in various ways. • I use my knowledge of order of operations to carry out calculations involving all four operations. • I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. • I can multiply simple pairs of proper fractions, writing the answer in its simplest form. • I can divide proper fractions by whole numbers. • I can associate a fraction with division and calculate decimal fraction equivalents. • I can express missing number problems algebraically. • I can find pairs of numbers that satisfy number sentences involving two unknowns.	• I can recognise, describe and build simple 3D shapes, including making nets. • I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangle, quadrilateral and regular polygons. • I can illustrate and name parts of circles, including radius, diameter and circumference and know that the radius is half the diameter. • I can read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and visa versa, using decimal notation to up to 3 decimal places. • I can calculate the area of a parallelogram and triangles and calculate, estimate and compare volume of cubes and cuboids using standard units. • I can interpret and construct pie charts and line graphs and use these to solve problems.

Key Assessment Criteria



Being a scientist

The key assessment criteria for science have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as scientists.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

The criteria are linked to the statutory requirements of the programme of study. Teachers should use the non-statutory advice as it helps to broaden and enrich scientific learning and progress.

Coverage within the science National Curriculum

Department for Education

	Biology				Chemistry				Physics					
	Plants	Animals, including humans	Living things & habitats	Evolution & inheritance	Rocks	Everyday materials	Properties & changes of materials	States of matter	Light	Sound	Forces & magnets	Seasonal changes	Earth & space	Electricity
Yr 1	X	X				X						X		
Yr 2	X	X	X			X								
Yr 3	X	X			X				X		X			
Yr 4		X	X					X		X				X
Yr 5		X	X				X				X		X	
Yr 6		X	X	X					X					X

What the National Curriculum requires in science at KS1

Department for Education

Working scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions.

Working scientifically

What the National Curriculum requires in science at Y1

Department for Education

Plants

Pupils should be taught to:

- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- Identify and describe the basic structure of a variety of common flowering plants, including trees.

Animals, including humans

Pupils should be taught to:

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores
- describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Biology

Everyday materials

Pupils should be taught to:

- Distinguish between an object and the material from which it is made
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- Describe the simple physical properties of a variety of everyday materials
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.

Chemistry

Seasonal changes

Pupils should be taught to:

- Observe changes across the four seasons
- Observe and describe weather associated with the seasons and how day length varies.

Physics

What the National Curriculum requires in science at Y2

Department for Education

Living things and their habitats
Pupils should be taught to:
- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including micro-habitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Plants
Pupils should be taught to:
- Observe and describe how seeds and bulbs grow into mature plants
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Animals, including humans
Pupils should be taught to:
- Notice that animals, including humans, have offspring which grow into adults
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Biology

Uses of everyday materials
Pupils should be taught to:
- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Chemistry

Working scientifically

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.

Working scientifically

What the National Curriculum requires in science at Y3

Department for Education

Plants
Pupils should be taught to:
- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- Investigate the way in which water is transported within plants
- Explore the part that flowers play in the life cycle

Animals, including humans
Pupils should be taught to:
- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- Identify that humans and some other animals have skeletons and muscles for support, protection and movement

Biology

Rocks
Pupils should be taught to:
- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock
- Recognise that soils are made from rocks and organic matter.

Chemistry

Light
Pupils should be taught to:
- Recognise that they need light in order to see things and that dark is the absence of light
- Notice that light is reflected from surfaces
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- Recognise that shadows are formed when the light from a light source is blocked by a solid object
- Find patterns in the way that the size of shadows change.

Forces and magnets
Pupils should be taught to:
- Compare how things move on different surfaces
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance
- Observe how magnets attract or repel each other and attract some materials and not others
- Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- Describe magnets as having two poles
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Physics

What the National Curriculum requires in science at Y4

Department for Education

Living things and their habitats
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.

Animals, including humans
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.

Biology

States of matter
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.

Chemistry

Sound
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.

Electricity
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.

Physics

Working scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- Identifying scientific evidence that has been used to support or refute ideas or arguments.

Working scientifically

What the National Curriculum requires in science at Y5

Department for Education

Living things and their habitats
Pupils should be taught to:
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals.

Animals, including humans
Pupils should be taught to:
- Describe the changes as humans develop to old age.

Biology

Earth and space
Pupils should be taught to:
- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

Forces
Pupils should be taught to:
- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Physics

Properties and changes of materials
Pupils should be taught to:
- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- Demonstrate that dissolving, mixing and changes of state are reversible changes
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Chemistry

What the National Curriculum requires in science at Y6

Department for Education

Living things and their habitats
Pupils should be taught to:
- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- Give reasons for classifying plants and animals based on specific characteristics.

Animals, including humans
Pupils should be taught to:
- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- Describe the ways in which nutrients and water are transported within animals, including humans.

Evolution and inheritance
Pupils should be taught to:
- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Biology

Light
Pupils should be taught to:
- Recognise that light appears to travel in straight lines
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Electricity
Pupils should be taught to:
- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram.

Physics

Science 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in science by the end of Key Stage Two.

Working scientifically

- Recall and use appropriately terminology such as accurate, conclusion, evidence, fair test, method, observe, pattern, prediction, reliable, results, supports (evidence) and variable
- For a given task they can identify the most appropriate approach for answering scientific questions and select the most appropriate equipment and sources of evidence needed for a task
- Plan different types of scientific enquiry, make careful observations, take accurate measurements or readings using the appropriate units as required and identify when to repeat measurements, if necessary, to ensure given results are reliable
- Record, present and interpret data from different sources, using a range of methods, including tables, graphs (bar charts and line graphs), diagrams and keys
- Apply their understanding of scientific concepts to draw valid conclusions from data
- Use data to make predictions for missing values
- Identify or use evidence to support or refute ideas or arguments
- Recognise the validity and reliability of evidence and the difference between fact and opinion.

Science 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in science by the end of Key Stage Two.

Biology

- Recall and use appropriately terminology such as adaptation, circulatory system, classification, consumer, evolution, function, germination, invertebrates, nutrients, pollination, predator, prey, producer, reproduction, seed dispersal and vertebrates
- Describe the processes involved in different stages of the flowering plant's life cycle and the function of different parts of flowering plants
- Describe how water and nutrients are transported in plants
- Compare the requirements of plants and animals to live and grow well
- Compare the similarities and differences between the life cycles of different animals (including humans and other mammals, birds, amphibians, and insects)
- Describe the functions of parts of the digestive system in animals
- Describe the functions of the main parts of the circulatory system (including the transport of nutrients and water) in animals
- Describe the functions of the skeleton and muscles in animals
- Describe the effects of diet, exercise, drugs and lifestyle on how our bodies function in the long and short term
- Construct and interpret food chains
- Use keys to group, classify or identify living things, and construct simple dichotomous keys
- Describe the main characteristics used to group plants, animals and micro-organisms according to the main groups (vertebrates, invertebrates, birds, mammals, reptiles, fish and amphibians) in the classification system
- Explain how a change in an environment may have an impact on living things
- Identify that there is variation between offspring and between offspring and their parents because of differences in inherited characteristics
- Describe how plants and animals have adapted to their environment and how this may have led to their evolution
- Describe how living things have changed over time and that fossils provide information about living things in the past.

Science 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in science by the end of Key Stage Two.

Chemistry

- Recall and use appropriately terminology such as condensation, °C (degrees Celsius), evaporation, filtering, freezing, insoluble, melting, mixture, non-reversible, properties, reversible, solidifying, soluble and solution
- Compare the characteristics of different states of matter (solids, liquids and gases)
- Describe how materials can change state with reference to temperature, and explain everyday phenomena (including the water cycle) where changes of state occur
- Classify and group materials according to properties such as appearance (for rocks), hardness, solubility, transparency, conductivity and magnetism
- Describe the advantages and disadvantages for the uses of everyday materials based on an understanding of their properties using appropriate terminology
- Identify and recognise everyday phenomena where dissolving occurs
- Describe how to appropriately separate different mixtures of materials, including solutions
- Identify and compare reversible and non-reversible changes
- Describe in simple terms how fossils are formed
- Describe the composition of soil.

Science 2016: The expected standard

2016

In preparing for the new statutory assessment arrangements in 2016, the government has identified the bullet points below as the 'expected standard' in science by the end of Key Stage Two.

Physics

- Recall and use appropriately terminology such as air resistance, attraction, conductor, friction, gravity, insulator, newtons (N), opaque, orbit, pitch, repulsion, sphere, translucent, transparent, vibration, voltage, volume and water resistance
- Explain how we see other objects (from a single reflection) and represent this in simple diagrammatic form
- Explain shadow formation and how the size of shadows may change
- Explain how sounds are made and describe how they require a medium to travel through from the source to the ear
- Describe how volume can be changed with reference to vibration
- Describe how the features of an object determine the pitch of a sound
- Describe the shape of bodies (spheres) in the solar system and the movement of bodies in the solar system relative to each other
- Explain how day and night, including the apparent movement of the sun across the sky, are related to the Earth's rotation
- Draw or complete a simple series circuit diagram using recognised symbols including straight lines for wires
- Explain how changes made to a circuit can affect how it works
- Identify and describe the effects of contact and non-contact forces on moving and stationary objects
- Describe the effects of magnets on magnets and other materials
- Describe how simple pulleys, levers, springs and gears increase the effects of a force.

Key Assessment Criteria: *Being a scientist*

A year 1 scientist			
Working scientifically (Y1 and Y2) • I can ask simple scientific questions. • I can use simple equipment to make observations. • I can carry out simple tests. • I can identify and classify things. • I can suggest what I have found out. • I can use simple data to answer questions	**Biology** <u>Plants</u> • I can name a variety of common wild and garden plants. • I can name the petals, stem, leaf and root of a plant. • I can name the roots, trunk, branches and leaves of a tree. <u>Animals, including humans</u> • I can name a variety of animals including fish, amphibians, reptiles birds and mammals. • I can classify and name animals by what they eat (carnivore, herbivore and omnivore). • I can sort animals into categories (including fish, amphibians, reptiles, birds and mammals). • I can sort living and non-living things. • I can name the parts of the human body that I can see. • I can link the correct part of the human body to each sense.	**Chemistry** <u>Everyday materials</u> • I can distinguish between an object and the material it is made from. • I can explain the materials that an object is made from. • I can name wood, plastic, glass, metal, water and rock. • I can describe the properties of everyday materials. • I can group objects based on the materials they are made from.	**Physics** <u>Seasonal changes</u> • I can observe and comment on changes in the seasons. • I can name the seasons and suggest the type of weather in each season.

Key Assessment Criteria: *Being a scientist*

A year 2 scientist			
Working scientifically (Y1 and Y2) • I can ask simple scientific questions. • I can use simple equipment to make observations. • I can carry out simple tests. • I can identify and classify things. • I can suggest what I have found out. • I can use simple data to answer questions	**Biology** <u>Living things and their habitats</u> • I can identify things that are living, dead and never lived. • I can describe how a specific habitat provides for the basic needs of things living there (plants and animals). • I can identify and name plants and animals in a range of habitats. • I can match living things to their habitat. • I can describe how animals find their food. • I can name some different sources of food for animals. • I can explain a simple food chain. <u>Plants</u> • I can describe how seeds and bulbs grow into plants. • I can describe what plants need in order to grow and stay healthy (water, light & suitable temperature). <u>Animals, including humans</u> • I can explain the basic stages in a life cycle for animals, including humans. • I can describe what animals and humans need to survive. • I can describe why exercise, a balanced diet and good hygiene are important for humans.	**Chemistry** <u>Uses of everyday materials</u> • I can identify and name a range of materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard. • I can suggest why a material might or might not be used for a specific job. • I can explore how shapes can be changed by squashing, bending, twisting and stretching.	**Physics** No content

Key Assessment Criteria: *Being a scientist*

A year 3 scientist

Working scientifically (Y3 and Y4)

- I can ask relevant scientific questions.
- I can use observations and knowledge to answer scientific questions.
- I can set up a simple enquiry to explore a scientific question.
- I can set up a test to compare two things.
- I can set up a fair test and explain why it is fair.
- I can make careful and accurate observations, including the use of standard units.
- I can use equipment, including thermometers and data loggers to make measurements.
- I can gather, record, classify and present data in different ways to answer scientific questions.
- I can use diagrams, keys, bar charts and tables; using scientific language.
- I can use findings to report in different ways, including oral and written explanations, presentation.
- I can draw conclusions and suggest improvements.
- I an make a prediction with a reason.
- I can identify differences, similarities and changes related to an enquiry.

Biology

Plants
- I can describe the function of different parts of flowing plants and trees.
- I can explore and describe the needs of different plants for survival.
- I can explore and describe how water is transported within plants.
- I can describe the plant life cycle, especially the importance of flowers.

Animals, including humans
- I can explain the importance of a nutritious, balanced diet.
- I can explain how nutrients, water and oxygen are transported within animals and humans.
- I can describe and explain the skeletal system of a human.
- I can describe and explain the muscular system of a human.
- I can describe the purpose of the skeleton in humans and animals.

Chemistry

Rocks
- I can compare and group rocks based on their appearance and physical properties, giving a reason.
- I can describe how fossils are formed.
- I can describe how soil is made.
- I can describe and explain the difference between sedimentary and igneous rock.

Physics

Light
- I can describe what dark is (the absence of light).
- I can explain that light is needed in order to see.
- I can explain that light is reflected from a surface.
- I can explain and demonstrate how a shadow is formed.
- I can explore shadow size and explain.
- I can explain the danger of direct sunlight and describe how to keep protected.

Forces and magnets
- I can explore and describe how objects move on different surfaces.
- I can explain how some forces require contact and some do not, giving examples.
- I can explore and explain how objects attract and repel in relation to objects and other magnets.
- I can predict whether objects will be magnetic and carry out an enquiry to test this out.
- I can describe how magnets work.
- I can predict whether magnets will attract or repel and give a reason.

Key Assessment Criteria: *Being a scientist*

A year 4 scientist

Working scientifically (Y3 and Y4)

- I can ask relevant scientific questions.
- I can use observations and knowledge to answer scientific questions.
- I can set up a simple enquiry to explore a scientific question.
- I can set up a test to compare two things.
- I can set up a fair test and explain why it is fair.
- I can make careful and accurate observations, including the use of standard units.
- I can use equipment, including thermometers and data loggers to make measurements.
- I can gather, record, classify and present data in different ways to answer scientific questions.
- I can use diagrams, keys, bar charts and tables; using scientific language.
- I can use findings to report in different ways, including oral and written explanations, presentation.
- I can draw conclusions and suggest improvements.
- I an make a prediction with a reason.
- I can identify differences, similarities and changes related to an enquiry.

Biology

Living things and their habitats
- I can group living things in different ways.
- I can use classification keys to group, identify and name living things.
- I can create classification keys to group, identify and name living things (for others to use).
- I can describe how changes to an environment could endanger living things.

Animals, including humans
- I can identify and name the parts of the human digestive system.
- I can describe the functions of the organs in the human digestive system.
- I can identify and describe the different types of teeth in humans.
- I can describe the functions of different human teeth.
- I can use food chains to identify producers, predators and prey.
- I can construct food chains to identify producers, predators and prey.

Chemistry

States of matter
- I can group materials based on their state of matter (solid, liquid, gas).
- I can describe how some materials can change state.
- I can explore how materials change state.
- I can measure the temperature at which materials change state.
- I can describe the water cycle.
- I can explain the part played by evaporation and condensation in the water cycle.

Physics

Sound
- I can describe how sound is made.
- I can explain how sound travels from a source to our ears.
- I can explain the place of vibration in hearing.
- I can explore the correlation between pitch and the object producing a sound.
- I can explore the correlation between the volume of a sound and the strength of the vibrations that produced it.
- I can describe what happens to a sound as it travels away from its source.

Electricity
- I can identify and name appliances that require electricity to function.
- I can construct a series circuit.
- I can identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers).
- I can draw a circuit diagram.
- I can predict and test whether a lamp will light within a circuit.
- I can describe the function of a switch in a circuit.
- I can describe the difference between a conductor and insulators; giving examples of each.

Key Assessment Criteria: *Being a scientist*

A year 5 scientist

Working scientifically (Y5 and Y6)

- I can plan different types of scientific enquiry.
- I can control variables in an enquiry.
- I can measure accurate and precisely using a range of equipment.
- I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- I can use the outcome of test results to make predictions and set up a further comparative fair test.
- I can report findings from enquiries in a range of ways.
- I can explain a conclusion from an enquiry.
- I can explain causal relationships in an enquiry.
- I can relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.
- Read, spell and pronounce scientific vocabulary accurately.

Biology

Living things and their habitats
- I can describe the life cycle of different living things, e.g. mammal, amphibian, insect bird.
- I can describe the differences between different life cycles.
- I can describe the process of reproduction in plants.
- I can describe the process of reproduction in animals.

Animals, including humans
- I can create a timeline to indicate stages of growth in humans.

Chemistry

Properties and changes of materials
- I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets).
- I can describe how a material dissolves to form a solution; explaining the process of dissolving.
- I can describe and show how to recover a substance from a solution.
- I can describe how some materials can be separated.
- I can demonstrate how materials can be separated (e.g. through filtering, sieving and evaporating).
- I know and can demonstrate that some changes are reversible and some are not.
- I can explain how some changes result in the formation of a new material and that this is usually irreversible.
- I can discuss reversible and irreversible changes.
- I can give evidenced reasons why materials should be used for specific purposes.

Physics

Earth and space
- I can describe and explain the movement of the Earth and other planets relative to the Sun.
- I can describe and explain the movement of the Moon relative to the Earth.
- I can explain and demonstrate how night and day are created.
- I can describe the Sun, Earth and Moon (using the term spherical).

Forces
- I can explain what gravity is and its impact on our lives.
- I can identify and explain the effect of air resistance.
- I can identify and explain the effect of water resistance.
- I can identify and explain the effect of friction.
- I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.

Key Assessment Criteria: *Being a scientist*

A year 6 scientist

Working scientifically (Y5 and Y6)

- I can plan different types of scientific enquiry.
- I can control variables in an enquiry.
- I can measure accurate and precisely using a range of equipment.
- I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- I can use the outcome of test results to make predictions and set up a further comparative fair test.
- I can report findings from enquiries in a range of ways.
- I can explain a conclusion from an enquiry.
- I can explain causal relationships in an enquiry.
- I can relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.
- Read, spell and pronounce scientific vocabulary accurately.

Biology

<u>Living things and their habitats</u>
- I can classify living things into broad groups according to observable characteristics and based on similarities & differences.
- I can describe how living things have been classified.
- I can give reasons for classifying plants and animals in a specific way.

<u>Animals, including humans</u>
- I can identify and name the main parts of the human circulatory system.
- I can describe the function of the heart, blood vessels and blood.
- I can discuss the impact of diet, exercise, drugs and life style on health.
- I can describe the ways in which nutrients and water are transported in animals, including humans.

<u>Evolution and inheritance</u>
- I can describe how the earth and living things have changed over time.
- I can explain how fossils can be used to find out about the past.
- I can explain about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents).
- I can explain how animals and plants are adapted to suit their environment.
- I can link adaptation over time to evolution.
- I can explain evolution.

Chemistry

No content

Physics

<u>Light</u>
- I can explain how light travels.
- I can explain and demonstrate how we see objects.
- I can explain why shadows have the same shape as the object that casts them.
- I can explain how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.

<u>Electricity</u>
- I can explain how the number & voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer.
- I can compare and give reasons for why components work and do not work in a circuit.
- I can draw circuit diagrams using correct symbols.

Key Assessment Criteria

Being an historian

The key assessment criteria for history have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as historians.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value. In particular, teachers may wish to add some history subject specific (knowledge) criteria.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in history at KS1

Department for Education

Pupils should develop an awareness of the past, using common words and phrases relating to the passing of time. They should know where the people and events they study fit within a chronological framework and identify similarities and differences between ways of life in different periods. They should use a wide vocabulary of everyday historical terms. They should ask and answer questions, choosing and using parts of stories and other sources to show that they know and understand key features of events. They should understand some of the ways in which we find out about the past and identify different ways in which it is represented.

Being an historian

In planning to ensure the progression described above through teaching about the people, events and changes outlined below, teachers are often introducing pupils to historical periods that they will study more fully at key stages 2 and 3.

Pupils should be taught about:

- changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life
- events beyond living memory that are significant nationally or globally [for example, the Great Fire of London, the first aeroplane flight or events commemorated through festivals or anniversaries]
- the lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods [for example, Elizabeth I and Queen Victoria, Christopher Columbus and Neil Armstrong, William Caxton and Tim Berners-Lee, Pieter Bruegel the Elder and LS Lowry, Rosa Parks and Emily Davison, Mary Seacole and/or Florence Nightingale and Edith Cavell]
- significant historical events, people and places in their own locality.

Historical content

What the National Curriculum requires in history at KS2

Department for Education

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.

Being an historian

Pupils should be taught about:

- changes in Britain from the Stone Age to the Iron Age
- the Roman Empire and its impact on Britain
- Britain's settlement by Anglo-Saxons and Scots
- the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor
- a local history study
- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
- the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China
- Ancient Greece – a study of Greek life and achievements and their influence on the western world
- a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300.

Historical content

Key Assessment Criteria: *Being an historian*

A year 1 historian	A year 2 historian	A year 3 historian
• I can use words and phrases like: old, new and a long time ago. • I can recognise that some objects belonged to the past. • I can explain how I have changed since I was born. • I can explain how some people have helped us to have better lives. • I can ask and answer questions about old and new objects. • I can spot old and new things in a picture. • I can explain what an object from the past might have been used for.	• I can use words and phrases like: before, after, past, present, then and now. • I can recount the life of someone famous from Britain who lived in the past. I can explain what they did earlier and what they did later. • I can give examples of things that were different when my grandparents were children. • I can find out things about the past by talking to an older person. • I can answer questions using books and the internet. • I can research the life of a famous person from the past using different sources of evidence.	• I can describe events from the past using dates when things happened. • I can use a timeline within a specific period of history to set out the order that things may have happened. • I can use my mathematical knowledge to work out how long ago events happened. • I can explain some of the times when Britain has been invaded. • I can use research skills to find answers to specific historical questions. • I can research in order to find similarities and differences between two or more periods of history.

Key Assessment Criteria: *Being an historian*

A year 4 historian	A year 5 historian	A year 6 historian
• I can plot events on a timeline using centuries. • I can use my mathematical skills to round up time differences into centuries and decades. • I can explain how the lives of wealthy people were different from the lives of poorer people. • I can explain how historic items and artefacts can be used to help build up a picture of life in the past. • I can explain how an event from the past has shaped our life today. • I can research two versions of an event and explain how they differ. • I can research what it was like for children in a given period of history and present my findings to an audience.	• I can draw a timeline with different historical periods showing key historical events or lives of significant people. • I can compare two or more historical periods; explaining things which changed and things which stayed the same. • I can explain how Parliament affects decision making in England. • I can explain how our locality has changed over time. • I can test out a hypothesis in order to answer questions. • I can describe how crime and punishment has changed over a period of time.	• I can place features of historical events and people from the past societies and periods in a chronological framework. • I can summarise the main events from a period of history, explaining the order of events and what happened. • I can summarise how Britain has had a major influence on the world. • I can summarise how Britain may have learnt from other countries and civilizations (historically and more recently). • I can identify and explain differences, similarities and changes between different periods of history. • I can identify and explain propaganda. • I can describe a key event from Britain's past using a range of evidence from different sources. • I can describe the features of historical events and way of life from periods I have studied; presenting to an audience.

Key Assessment Criteria

Being a geographer

The key assessment criteria for geography have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as geographers.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in geography at KS1

Department for Education

Locational knowledge

- Name and locate the world's seven continents and five oceans
- Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas

Locational knowledge

Place knowledge

- Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country

Place knowledge

Human and physical geography

- Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles
- Use basic geographical vocabulary to refer to:
  - Key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather
  - Key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop

Human & physical geography

Geographical skills and fieldwork

- Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage
- Use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map
- Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key
- Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.

Geographical skills & fieldwork

What the National Curriculum requires in geography at KS2

Department for Education

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)

Locational knowledge

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

Place knowledge

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

Human & physical geography

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.

Geographical skills & fieldwork

Key Assessment Criteria: *Being a geographer*

A year 1 geographer	A year 2 geographer	A year 3 geographer
• I can keep a weather chart and answer questions about the weather. • I can explain where I live and tell someone my address. • I can explain some of the main things that are in hot and cold places. • I can explain the clothes that I would wear in hot and cold places. • I can explain how the weather changes throughout the year and name the seasons. • I can name the four countries in the United Kingdom and locate them on a map. • I can name some of the main towns and cities in the United Kingdom.	• I can say what I like and do not like about the place I live in. • I can say what I like and do not like about a different place. • I can describe a place outside Europe using geographical words. • I can describe some of the features of an island. • I can describe the key features of a place from a picture using words like beach, coast, forest, hill, mountain, ocean, valley. • I can explain how jobs may be different in other locations. • I can explain how an area has been spoilt or improved and give my reasons. • I can explain the facilities that a village, town and city may need and give reasons. • I can name the continents of the world and locate them on a map. • I can name the world oceans and locate them on a map. • I can name the capital cities of England, Wales, Scotland and Ireland. • I can find where I live on a map of the United Kingdom.	• I can use the correct geographical words to describe a place. • I can use some basic Ordnance Survey map symbols. • I can use grid references on a map. • I can use an atlas by using the index to find places. • I can describe how volcanoes are created. • I can locate and name some of the world's most famous volcanoes. • I can describe how earthquakes are created. • I can name a number of countries in the northern hemisphere. • I can name and locate the capital cities of neighbouring European countries.

Key Assessment Criteria: *Being a geographer*

A year 4 geographer	A year 5 geographer	A year 6 geographer
• I can carry out research to discover features of villages, towns or cities. • I can plan a journey to a place in England. • I can collect and accurately measure information (e.g. rainfall, temperature, wind speed, noise levels etc). • I can explain why people may be attracted to live in cities. • I can explain why people may choose to live in one place rather than another. • I can locate the Tropic of Cancer and Tropic of Capricorn. • I can explain the difference between the British Isles, Great Britain and the United Kingdom. • I know the countries that make up the European Union. • I can find at least six cities in the UK on a map. • I can name and locate some of the main islands that surround the United Kingdom. • I can name the areas of origin of the main ethnic groups in the United Kingdom and in our school.	• I can plan a journey to a place in another part of the world, taking account of distance and time. • I can explain why many cities are situated on or close to rivers. • I can explain why people are attracted to live by rivers. • I can explain the course of a river. • I can name and locate many of the world's most famous rivers in an atlas. • I can name and locate many of the world's most famous mountainous regions in an atlas. • I can explain how a location fits into its wider geographical location with reference to human and economical features.	• I can use Ordnance Survey symbols and 6 figure grid references. • I can answer questions by using a map. • I can use maps, aerial photographs, plans and e-resources to describe what a locality might be like. • I can describe how some places are similar and dissimilar in relation to their human and physical features. • I can name the largest desert in the world and locate desert regions in an atlas. • I can identify and name the Tropics of Cancer and Capricorn as well as the Arctic and Antarctic Circles. • I can explain how time zones work and calculate time differences around the world.

Key Assessment Criteria

Being an artist

The key assessment criteria for art have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as artists.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in art and design at KS1 and KS2

Department for Education

Pupils should be taught:

- to use a range of materials creatively to design and make products
- to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination
- to develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space
- about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work.

Key Stage 1

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.

Key Stage 2

Key Assessment Criteria: *Being an artist*

A year 1 artist	A year 2 artist	A year 3 artist
• I can show how people feel in paintings and drawings. • I can create moods in art work. • I can use pencils to create lines of different thickness in drawings. • I can name the primary and secondary colours. • I can create a repeating pattern in print. • I can cut, roll and coil materials. • I can use IT to create a picture. • I can describe what I can see and give an opinion about the work of an artist. • I can ask questions about a piece of art.	• I can choose and use three different grades of pencil when drawing. • I can use charcoal, pencil and pastel to create art. • I can use a viewfinder to focus on a specific part of an artefact before drawing it. • I can mix paint to create all the secondary colours. • I can create brown with paint. • I can create tints with paint by adding white. • I can create tones with paint by adding black. • I can create a printed piece of art by pressing, rolling, rubbing and stamping. • I can make a clay pot. • I can join two clay finger pots together. • I can use different effects within an IT paint package. • I can suggest how artists have used colour, pattern and shape. • I can create a piece of art in response to the work of another artist.	• I an show facial expressions in my art. • I can use sketches to produce a final piece of art. • I can use different grades of pencil to shade and to show different tones and textures. • I can create a background using a wash. • I can use a range of brushes to create different effects in painting. • I can identify the techniques used by different artists. • I can use digital images and combine with other media in my art. • I can use IT to create art which includes my own work and that of others. • I can compare the work of different artists. • I recognise when art is from different cultures. • I recognise when art is from different historical periods.

Key Assessment Criteria: *Being an artist*

A year 4 artist	A year 5 artist	A year 6 artist
• I can show facial expressions and body language in sketches and paintings. • I can use marks and lines to show texture in my art. • I can use line, tone, shape and colour to represent figure and forms in movement. • I can show reflections in my art. • I can print onto different materials using at least four colours. • I can sculpt clay and other mouldable materials. • I can integrate my digital images into my art. • I can experiment with the styles used by other artists. • I can explain some of the features of art from historical periods.	• I can identify and draw objects and use marks and lines to produce texture. • I can successfully use shading to create mood and feeling. • I can organise line, tone, shape and colour to represent figures and forms in movement. • I can use shading to create mood and feeling. • I can express emotion in my art. • I can create an accurate print design following criteria. • I can use images which I have created, scanned and found; altering them where necessary to create art. • I can research the work of an artist and use their work to replicate a style.	• I can explain why I have used different tools to create art. • I can explain why I have chosen specific techniques to create my art. • I can explain the style of my work and how it has been influenced by a famous artist. • I can over print to create different patterns. • I can use feedback to make amendments and improvement to my art. • I can use a range of e-resources to create art.

Key Assessment Criteria

Being a designer

The key assessment criteria for design and technology have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as designers.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in design and technology at KS1

Department for Education

When designing and making, pupils should be taught to:

Design
- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Design

Make
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Make

Evaluate
- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

Evaluate

Technical knowledge
- Build structures, exploring how they can be made stronger, stiffer and more stable
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Technical knowledge

What the National Curriculum requires in design and technology at KS2

Department for Education

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

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

Make

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

Evaluate

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.

Technical knowledge

What the National Curriculum requires in cooking and nutrition at KS1 and KS2

Department for Education

Pupils should be taught to:

Key stage 1

- Use the basic principles of a healthy and varied diet to prepare dishes
- Understand where food comes from.

Key Stage 1

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.

Key Stage 2

Key Assessment Criteria: *Being a designer*

A year 1 designer	A year 2 designer	A year 3 designer
• I can use my own ideas to make something. • I can describe how something works. • I can cut food safely. • I can make a product which moves. • I can make my model stronger. • I can explain to someone else how I want to make my product. • I can choose appropriate resources and tools. • I can make a simple plan before making.	• I can think of an idea and plan what to do next. • I can choose tools and materials and explain why I have chosen them. • I can join materials and components in different ways. • I can explain what went well with my work. • I can explain why I have chosen specific textiles. • I can measure materials to use in a model or structure. • I can describe the ingredients I am using.	• I can prove that my design meets some set criteria. • I can follow a step-by-step plan, choosing the right equipment and materials. • I can design a product and make sure that it looks attractive. • I can choose a textile for both its suitability and its appearance. • I can select the most appropriate tools and techniques for a given task. • I can make a product which uses both electrical and mechanical components. • I can work accurately to measure, make cuts and make holes. • I can describe how food ingredients come together.

Key Assessment Criteria: *Being a designer*

A year 4 designer	A year 5 designer	A year 6 designer
• I can use ideas from other people when I am designing. • I can produce a plan and explain it. • I can evaluate and suggest improvements for my designs. • I can evaluate products for both their purpose and appearance. • I can explain how I have improved my original design. • I can present a product in an interesting way. • I can measure accurately. • I can persevere and adapt my work when my original ideas do not work. • I know how to be both hygienic and safe when using food.	• I can come up with a range of ideas after collecting information from different sources. • I can produce a detailed, step-by-step plan. • I can suggest alternative plans; outlining the positive features and draw backs. • I can explain how a product will appeal to a specific audience. • I can evaluate appearance and function against original criteria. • I can use a range of tools and equipment competently. • I can make a prototype before make a final version. • I show that I can be both hygienic and safe in the kitchen.	• I can use market research to inform my plans and ideas. • I can follow and refine my plans. • I can justify my plans in a convincing way. • I can show that I consider culture and society in my plans and designs. • I show that I can test and evaluate my products. • I can explain how products should be stored and give reasons. • I can work within a budget. • I can evaluate my product against clear criteria.

Key Assessment Criteria

Being a musician

The key assessment criteria for music have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as musicians.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in music at KS1 and KS2

Department for Education

Pupils should be taught to:

- Use their voices expressively and creatively by singing songs and speaking chants and rhymes
- Play tuned and untuned instruments musically
- Listen with concentration and understanding to a range of high-quality live and recorded music
- Experiment with, create, select and combine sounds using the inter-related dimensions of music.

Key Stage 1

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.

Key Stage 2

Key Assessment Criteria: *Being a musician*

A year 1 musician	A year 2 musician	A year 3 musician
• I can use my voice to speak, sing and chant. • I can use instruments to perform. • I can clap short rhythmic patterns. • I can make different sounds with my voice and with instruments. • I can repeat short rhythmic and melodic patterns. • I can make a sequence of sounds. • I can respond to different moods in music. • I can say whether I like or dislike a piece of music. • I can choose sounds to represent different things. • I can follow instructions about when to play and sing.	• I can sing and follow a melody. • I can perform simple patterns and accompaniments keeping a steady pulse. • I can play simple rhythmic patterns on an instrument. • I can sing or clap increasing and decreasing tempo. • I can order sounds to create a beginning, middle and an end. • I can create music in response to different starting points. • I can choose sounds which create an effect. • I can use symbols to represent sounds. • I can make connections between notations and musical sounds. • I can listen out for particular things when listening to music. • I can improve my own work.	• I can sing a tune with expression. • I can play clear notes on instruments. • I can use different elements in my composition. • I can create repeated patterns with different instruments. • I can compose melodies and songs. • I can create accompaniments for tunes. • I can combine different sounds to create a specific mood or feeling. • I can use musical words to describe a piece of music and compositions. • I can use musical words to describe what I like and do not like about a piece of music. • I can recognise the work of at least one famous composer. • I can improve my work; explaining how it has been improved.

Key Assessment Criteria: *Being a musician*

A year 4 musician	A year 5 musician	A year 6 musician
• I can perform a simple part rhythmically. • I can sing songs from memory with accurate pitch. • I can improvise using repeated patterns. • I can use notation to record and interpret sequences of pitches. • I can use notation to record compositions in a small group or on my own. • I can explain why silence is often needed in music and explain what effect it has. • I can identify the character in a piece of music. • I can identify and describe the different purposes of music. • I can begin to identify the style of work of Beethoven, Mozart and Elgar.	• I can breathe in the correct place when singing. • I can maintain my part whilst others are preforming their part. • I can improvise within a group using melodic and rhythmic phrases. • I can change sounds or organise them differently to change the effect. • I can compose music which meets specific criteria. • I can use notation to record groups of pitches (chords). • I can use my music diary to record aspects of the composition process. • I can choose the most appropriate tempo for a piece of music. • I can describe, compare and evaluate music using musical vocabulary. • I can explain why I think music is successful or unsuccessful. • I can suggest improvement to my own work and that of others. • I can contrast the work of a famous composer and explain my preferences.	• I can sing in harmony confidently and accurately. • I can perform parts from memory. • I can take the lead in a performance. • I can use a variety of different musical devices in my composition (including melody, rhythms and chords). • I can evaluate how the venue, occasion and purpose affects the way a piece of music is created. • I can analyse features within different pieces of music. • I can compare and contrast the impact that different composers from different times have had on people of that time.

Key Assessment Criteria

Being a sports person

The key assessment criteria for physical education have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as sports people.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in physical education at KS1 and KS2

Department for Education

Key stage 1

Pupils should be taught to:

- Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities
- Participate in team games, developing simple tactics for attacking and defending
- Perform dances using simple movement patterns.

Key Stage 1

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.

Key Stage 2

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.

Swimming

Key Assessment Criteria: *Being a sports person*

A year 1 sports person	A year 2 sports person	A year 3 sports person
Games • I can throw underarm. • I can hit a ball with a bat. • I can move and stop safely. • I can throw and catch with both hands. • I can throw and kick in different ways. Gymnastics • I can make my body curled, tense, stretched and relaxed. • I can control my body when travelling and balancing. • I can copy sequences and repeat them. • I can roll, curl, travel and balance in different ways. Dance • I can move to music. • I can copy dance moves. • I can perform my own dance moves. • I can make up a short dance. • I can move safely in a space. General • I can copy actions. • I can repeat actions and skills. • I can move with control and care. • I can use equipment safely.	Games • I can use hitting, kicking and/or rolling in a game. • I can decide the best space to be in during a game. • I can use one tactic in a game. • I can follow rules. Gymnastics • I can plan and perform a sequence of movements. • I can improve my sequence based on feedback. • I can think of more than one way to create a sequence which follows some 'rules'. • I can work on my own and with a partner. Dance • I can change rhythm, speed, level and direction in my dance. • I can dance with control and coordination. • I can make a sequence by linking sections together. • I can use dance to show a mood or feeling. General • I can copy and remember actions. • I can talk about what is different from what I did and what someone else did.	Games • I can throw and catch with control. • I am aware of space and use it to support team-mates and to cause problems for the opposition. • I know and use rules fairly. Gymnastics • I can adapt sequences to suit different types of apparatus and criteria. • I can explain how strength and suppleness affect performance. • I can compare and contrast gymnastic sequences. Dance • I can improvise freely and translate ideas from a stimulus into movement. • I can share and create phrases with a partner and small group. • I can repeat, remember and perform phrases. Athletics • I can run at fast, medium and slow speeds; changing speed and direction. • I can take part in a relay, remembering when to run and what to do. Outdoor and adventurous • I can follow a map in a familiar context. • I can use clues to follow a route. • I can follow a route safely.

Key Assessment Criteria: *Being a sports person*

A year 4 sports person	A year 5 sports person	A year 6 sports person
Games • I can catch with one hand. • I can throw and catch accurately. • I can hit a ball accurately with control. • I can keep possession of the ball. • I can vary tactics and adapt skills depending on what is happening in a game. Gymnastics • I can work in a controlled way. • I can include change of speed and direction. • I can include a range of shapes. • I can work with a partner to create, repeat and improve a sequence with at least three phases. Dance • I can take the lead when working with a partner or group. • I can use dance to communicate an idea. Athletics • I can run over a long distance. • I can sprint over a short distance. • I can throw in different ways. • I can hit a target. • I can jump in different ways. Outdoor and adventurous • I can follow a map in a (more demanding) familiar context. • I can follow a route within a time limit.	Games • I can gain possession by working a team. • I can pass in different ways. • I can use forehand and backhand with a racket. • I can field. • I can choose a tactic for defending and attacking. • I can use a number of techniques to pass, dribble and shoot. Gymnastics • I can make complex extended sequences. • I can combine action, balance and shape. • I can perform consistently to different audiences. Dance • I can compose my own dances in a creative way. • I can perform to an accompaniment. • My dance shows clarity, fluency, accuracy and consistency. Athletics • I cam controlled when taking off and landing. • I can throw with accuracy. • I can combine running and jumping. Outdoor and adventurous • I can follow a map in an unknown location. • I can use clues and a compass to navigate a route. • I can change my route to overcome a problem. • I can use new information to change my route.	Games • I can play to agreed rules. • I can explain rules. • I can umpire. • I can make a team and communicate plan. • I can lead others in a game situation. Gymnastics • I can combine my own work with that of others. • I can link sequences to specific timings. Dance • I can develop sequences in a specific style. • I can choose my own music and style. Athletics • I can demonstrate stamina. Outdoor and adventurous • I can plan a route and a series of clues for someone else. • I can plan with others taking account of safety and danger.

Key Assessment Criteria

Being a computer user

The key assessment criteria for computing have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as computer users.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in computing at KS1 and KS2

Department for Education

Pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 1

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.

Key Stage 2

Key Assessment Criteria: *Being a computer user*

A year 1 computer user	A year 2 computer user	A year 3 computer user
<u>Algorithms and programming</u> • I can create a series of instructions. • I can plan a journey for a programmable toy. <u>Information technology</u> • I can create digital content. • I can store digital content. • I can retrieve digital content. • I can use a web site. • I can use a camera. • I can record sound and play back. <u>Digital literacy</u> • I can use technology safely. • I can keep personal information private.	<u>Algorithms and programming</u> • I can use a range of instructions (e.g. direction, angles, turns). • I can test and amend a set of instructions. • I can find errors and amend. (debug) • I can write a simple program and test it. • I can predict what the outcome of a simple program will be (logical reasoning). • I understand that algorithms are used on digital devices. • I understand that programs require precise instructions. <u>Information technology</u> • I can organise digital content. • I can retrieve and manipulate digital content. • I can navigate the web to complete simple searches. <u>Digital literacy</u> • I use technology respectfully. • I know where to go for help if I am concerned. • I know how technology is used in school and outside of school.	<u>Algorithms and programming</u> • I can design a sequence of instructions, including directional instructions. • I can write programs that accomplish specific goals. • I can work with various forms of input. • I can work with various forms of output. <u>Information technology</u> • I can use a range of software for similar purposes. • I can collect information. • I can design and create content. • I can present information. • I can search for information on the web in different ways. • I can manipulate and improve digtal images. <u>Digital literacy</u> • I use technology respectfully and responsibly. • I know different ways I can get help if I am concerned. • I understand what computer networks do and how they provide multiple services. • I can discern where it is best to use technology and where it adds little or no value.

Key Assessment Criteria: *Being a computer user*

A year 4 computer user	A year 5 computer user	A year 6 computer user
Algorithms and programming • I can experiment with variables to control models. • I can give an on-screen robot specific instructions that takes them from A to B. • I can make an accurate prediction and explain why I believe something will happen (linked to programming). • I can de-bug a program. Information technology • I can select and use software to accomplish given goals. • I can collect and present data. • I can produce and upload a pod cast. Digital literacy • I recognise acceptable and unacceptable behaviour using technology.	Algorithms and programming • I can combine sequences of instructions and procedures to turn devices on and off. • I can use technology to control an external device. • I can design algorithms that use repetition & 2-way selection. Information technology • I can analyse information. • I can evaluate information. • I understand how search results are selected and ranked. • I can edit a film. Digital literacy • I understand that you have to make choices when using technology and that not everything is true and/or safe.	Algorithms and programming • I can design a solution by breaking a problem up. • I recognise that different solutions can exist for the same problem. • I can use logical reasoning to detect errors in algorithms. • I can use selection in programs. • I can work with variables. • I can explain how an algorithm works. • I can explore 'what if' questions by planning different scenarios for controlled devices. Information technology • I can select, use and combine software on a range of digital devices. • I can use a range of technology for a specific project. Digital literacy • I can discuss the risks of online use of technology. • I can identify how to minimise risks.

Key Assessment Criteria: *Being a computer user*

A safe computer user in Y1 and Y2	
Knowledge and understanding • I understand the different methods of communication (e.g. email, online forums etc). • I know you should only open email from a known source. • I know the difference between email and communication systems such as blogs and wikis. • I know that websites sometimes include pop-ups that take me away from the main site. • I know that bookmarking is a way to find safe sites again quickly. • I have begun to evaluate websites and know that everything on the internet is not true. • I know that it is not always possible to copy some text and pictures from the internet. • I know that personal information should not be shared online. • I know I must tell a trusted adult immediately if anyone tries to meet me via the internet.	Skills • I follow the school's safer internet rules. • I can use the search engines agreed by the school. • I know what to do if I find something inappropriate online or something I am unsure of (including identifying people who can help; minimising screen; online reporting using school system etc). • I can use the internet for learning and communicating with others, making choices when navigating through sites. • I can send and receive email as a class. • I can recognise advertising on websites and learn to ignore it. • I can use a password to access the secure network.

Key Assessment Criteria: *Being a computer user*

A safe computer user in Y3 and Y4	
Knowledge and understanding • I understand the need for rules to keep me safe when exchanging learning and ideas online. • I recognise that information on the internet may not be accurate or reliable and may be used for bias, manipulation or persuasion. • I understand that the internet contains fact, fiction and opinion and begin to distinguish between them. • I use strategies to verify information, e.g. cross-checking. • I understand the need for caution when using an internet search for images and what to do if I find an unsuitable image. • I understand that copyright exists on most digital images, video and recorded music. • I understand the need to keep personal information and passwords private. • I understand that if I make personal information available online it may be seen and used by others. • I know how to respond if asked for personal information or feel unsafe about content of a message. • I recognise that cyber bullying is unacceptable and will be sanctioned in line with the school's policy. • I know how to report an incident of cyber bullying. • I know the difference between online communication tools used in school and those used at home. • I understand the need to develop an alias for some public online use. • I understand that the outcome of internet searches at home may be different than at school.	Skills • I follow the school's safer internet rules. • I recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new. • I can identify when emails should not be opened and when an attachment may not be safe. • I can explain and demonstrate how to use email safely. • I can use different search engines.

Key Assessment Criteria: *Being a computer user*

A safe computer user in Y5 and Y6	
Knowledge and understanding • I can discuss the positive and negative impact of the use of ICT in my own life, my friends and family. • I understand the potential risk of providing personal information online. • I recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content. • I understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented. • I recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing). • I understand that some material on the internet is copyrighted and may not be copied or downloaded. • I understand that some messages may be malicious and know how to deal with this. • I understand that online environments have security settings, which can be altered, to protect the user. • I understand the benefits of developing a 'nickname' for online use. • I understand that some malicious adults may use various techniques to make contact and elicit personal information. • I know that it is unsafe to arrange to meet unknown people online. • I know how to report any suspicions. • I understand I should not publish other people's pictures or tag them on the internet without permission. • I know that content put online is extremely difficult to remove. • I know what to do if I discover something malicious or inappropriate.	Skills • I follow the school's safer internet rules. • I can make safe choices about the use of technology. • I can use technology in ways which minimises risk. e.g. responsible use of online discussions, etc. • I can create strong passwords and manage them so that they remain strong. • I can independently, and with regard for e-safety, select and use appropriate communication tools to solve problems by collaborating and communicating with others within and beyond school. • I can competently use the internet as a search tool. • I can reference information sources. • I can use appropriate strategies for finding, critically evaluating, validating and verifying information. e.g. using different keywords, skim reading to check relevance of information, cross checking with different websites or other non ICT resources. • I can use knowledge of the meaning of different domain names and common website extensions (e.g. .co.uk; .com; .ac; .sch; .org; .gov; .net) to support validation of information.

Key Assessment Criteria

Being an international speaker

The key assessment criteria for languages have been devised in such a way that they can be applied in all settings, regardless of the agreed programme of study. These criteria allow teachers to assess how well children are developing as international speakers.

Teachers may wish to supplement these key assessment criteria with other criteria if they feel that this adds value.

In devising the key assessment criteria, judgements had to be made about what is considered age appropriate in line with the key stage programmes of study. These have been tested and evaluated by class teachers.

In presenting these criteria, there is no suggestion that this is the only 'correct' sequence; but rather a suggestion to help teachers plan and assess.

What the National Curriculum requires in foreign language at KS2

Department for Education

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

Key Stage 2

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

Key Assessment Criteria: ***Being an international speaker***

KS2

- I can listen to others speaking a different language.
- I can join in with songs and rhymes.
- I can answer questions.
- I can ask questions.
- I can give an opinion.
- I can speak in sentences.
- I can speak with accurate pronunciation and intonation.
- I can present ideas.
- I can describe people orally.
- I can describe places orally.
- I can describe things orally.
- I can describe actions orally.
- I can use phrases to create new sentences.
- I can use accurate grammar when I am speaking.

- I can read and show that I understand words and phrases.
- I can use a dictionary.

- I can write phrases from memory.
- I can use phrases to create new sentences in writing.
- I can describe people in writing.
- I can describe places in writing.
- I can describe things in writing.
- I can describe actions in writing.

Key Assessment Criteria: *Being an international speaker*

A year 1/2 international speaker	A year 3/4 international speaker	A year 5/6 international speaker
Spoken language • I can join in with songs and rhymes. • I can respond to a simple command. • I can answer with a single word. • I can answer with a short phrase. • I can ask a question. • I can name people. • I can name places. • I can name objects. • I can use set phrases. • I can choose the right word to complete a phrase. • I can choose the right word to complete a short sentence. Reading • I can read and understand single words. • I can read and understand short phrases. • I can use simple dictionaries to find the meaning of words. Writing • I can write single words correctly. • I can label a picture. • I can copy a simple word or phrase.	Spoken language • I can name and describe people. • I can name and describe a place. • I can name and describe an object. • I can have a short conversation saying 3-4 things. • I can give a response using a short phrase. • I am starting to speak in sentences. Reading • I can read and understand a short passage using familiar language. • I can explain the main points in a short passage. • I can read a passage independently. • I can use a bilingual dictionary or glossary to look up new words. Writing • I can write phrases from memory. • I can write 2-3 short sentences on a familiar topic. • I can say what I like/dislike about a familiar topic.	Spoken language • I can hold a simple conversation with at least 4 exchanges. • I can use my knowledge of grammar to speak correctly. Reading • I can understand a short story or factual text and note the main points. • I can use the context to work out unfamiliar words. Writing • I can write a paragraph of 4-5 sentences. • I can substitute words and phrases.