The English National Curriculum adapted for the Cayman Islands

August 2019

Key Stages 1 and 2 framework documents

**Reception
Years 1-6**

Acknowledgments

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Foreword

The New Cayman Islands National Curriculum represents the expectations for all students educated in the Cayman Islands in readiness for an ever changing world. It will focus in particular on the content essential for preparing children to be engaged and productive citizens. Beyond the national context, the curriculum also represents the expectations for students at an international level, focusing in on levels of knowledge and understanding that should be attained at each stage of their schooling. The new curriculum aims to do this while leveraging the current best practices in Cayman Islands government schools. Critical thinking, enquiry and reasoning are emphasised in all years of learning to ensure that children develop the ability to work creatively, think analytically and solve problems.

The New Cayman Islands National Curriculum has been developed by a team of professionals from the Ministry of Education, Youth, Sports, and Agriculture & Lands, Department of Education Services guided by Education Council. Working groups of local professionals, local teachers and curriculum specialists have helped to ensure that the curriculum reflects Cayman values and culture, and is relevant to the needs and interests of all students studying in the government schools.

Principals and teachers should find the Curriculum to be an excellent resource on which to base their planning, teaching and assessments. Quality instruction and high levels of scholastic achievement are crucial to the future success of our youth and the Cayman Islands.

Background/Rationale

Every student in the Cayman Islands has the right to a high-quality education and the opportunity to achieve their full potential. A new Cayman Islands National Curriculum is set to be launched in August 2019. The new Curriculum was adapted from the English National Curriculum 2014 and has been designed to incorporate modules focused on Caymanian history, geography and social studies. The curriculum is intended to allow students to become engaged, empowered and principled citizens. This will be achieved by providing every public-school learner with world class standards in knowledge they need in order to thrive in the 21st century and beyond.

Effective delivery of the curriculum will require knowledgeable, professional and agile educators who can use appropriate teaching methodologies to meet all learners at the point of need. Teachers must be able to adapt the curriculum to the talents of every student while diagnosing the learners' needs and collaborating with parents/guardians, members of the local and wider community.

The curriculum will include:

- Early Years Assessment (Reception)
- Phonics Screening Check (Year 1)
- End of Key Stage 1 test (Year 2)
- Multiplication Table Check (Year 4)
- End of Key Stage 2 test (Year 6)

Early Years Assessment (Reception)

The EYFS Profile is the statutory assessment that takes place at the end of the EYFS, during the summer term of the year in which the child reaches five, usually in the reception class. The EYFS profile summarises and describes children's attainment at the end of the EYFS. It gives:

- the child's attainment in relation to the 17 early learning goals (ELG) descriptors
- a short narrative describing the child's 3 characteristics of effective learning.
  - Phonics Screening Check (Year 1)

Phonics Screening Check (Year 1)

The phonics screening check will be taken individually by all students in Year 1. It is designed to give teachers and parents/guardians information on how the student is progressing in phonics. It will help to identify whether the student needs additional support at this stage so that they do not fall behind in this vital early reading skill.

The phonics screening check is designed to give teachers and parents/guardians information on how a child is progressing in phonics.

End of Key Stage 1 test (Year 2)
There are papers in:
- Reading (2 papers, 40 marks, about 70 minutes)
- Mathematics (2 papers, 60 marks, about 55 minutes)
- English grammar, punctuation and spelling (2 papers, 40 marks, about 35 minutes)

Multiplication Tables Check (Year 4)
The Multiplication Tables Check (MTC) is to determine whether children can recall their times tables fluently, which is essential for future success in mathematics. It will help schools to identify children who have not yet mastered their times tables, so that additional support can be provided.

End of Key Stage 2 test (Year 6)
There are papers in:
- Reading (1 paper, 50 marks, 60 minutes)
- Mathematics (3 papers, 110 marks, 110 minutes)
- English grammar, punctuation and spelling (2 papers, 70 marks, 60 minutes)

The children of the Cayman Islands will also be exposed to life skills from Early Years in addition to all the other subjects such as Cayman history, geography and culture. This provides a comprehensive foundation that will ensure children have the opportunity to acquire the necessary skills to help them navigate life's challenges as they progress with their education.

Table of Contents

1. Introduction

1. 1   This document sets out the framework for the New Cayman Islands National Curriculum at key stages 1 and 2 and includes:

- contextual information about both the overall school curriculum and the statutory national curriculum, including the statutory basis of the latter

- aims for the statutory national curriculum

- statements on inclusion, and on the development of students'' competence in numeracy and mathematics, language and literacy across the school curriculum

- programmes of study for key stages 1 and 2 for all the national curriculum subjects that are taught at these key stages.

2. The school curriculum in Cayman Islands

2. 1   Every government school must offer a curriculum which is balanced and broadly based and which:

- promotes the spiritual, moral, cultural, mental and physical development of students at the school and of society, and

- prepares students at the school for the opportunities, responsibilities and experiences of later life

2. 2   The school curriculum comprises all learning and other experiences that each school plans for its students. The national curriculum forms one part of the school curriculum.

2. 3   All government schools are also required to make provision for a daily act of collective worship and must teach religious education to children at every key stage

2. 4   All government schools in the Cayman Islands **<u>MUST</u>** follow the statutory national curriculum which sets out in programmes of study, on the basis of key stages, subject content for those subjects that should be taught to all children. **All schools must publish their school curriculum by subject and academic year online.**

2. 5   All schools should make provision for life skills drawing on good practice. Schools are also free to include other subjects or topics of their choice in planning and designing their own programme of education.

3. The National Curriculum in Cayman Islands

Aims

3. 1   The national curriculum provides students with an introduction to the essential knowledge that they need to be educated citizens. It introduces students to the best that has been thought and said; and helps engender an appreciation of human creativity and achievement.

3. 2   The national curriculum is just one element in the education of every child. There is time and space in the school day and in each week, term and year to range beyond the national curriculum specifications. The national curriculum provides an outline of core knowledge around which teachers can develop exciting and stimulating lessons to promote the development of students' knowledge, understanding and skills as part of the wider school curriculum.

Structure

3. 3   Children of compulsory school age <u>MUST</u> follow the New Cayman Islands National Curriculum. It is organised on the basis of two key stages classified as 'core' and 'other foundation' subjects

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The structure of the new Cayman Islands National Curriculum, in terms of which subjects are compulsory at each key stage, is set out in the table below:

Figure 1 – Structure of the national curriculum

	Key stage 1	Key stage 2
Age	5 – 7	7 – 11
Year groups	1 – 2	3 – 6
Core subjects		
English	✓	✓
Mathematics	✓	✓
Science	✓	✓
Foundation subjects		
Art and design	✓	✓
Computing	✓	✓
Design and technology	✓	✓
Languages (Spanish)		✓
Life Skills	✓	✓
Music	✓	✓
Physical education	✓	✓
Religious education	✓	✓
Social Studies	✓	✓

Statutory Guidelines for Primary Educational Stage

The minimum allocation for each mandatory subject is shown below as statutory guidelines for curriculum models to educate students of compulsory age at the Primary Educational Stage (Years 1-6 of compulsory education).

Key Stage 1

Core subjects	Minimum Time allocated in hours/minutes per week
English	8.5 hours
Mathematics	6 hours
Science	2.5 hours
Foundation subjects	
Art and design	1 hour
Computing	45 mins
Design and technology	45 mins
Languages (Spanish) * KS2 only	nil
Life Skills	45 mins
Music	1 hour
Physical education	2 hours
Religious education	45 mins
Social Studies	2 hours
Total number of hours	**26 hours**

Statutory Guidelines for Primary Educational Stage

The minimum allocation for each mandatory subject is shown below as statutory guidelines for curriculum models to educate students of compulsory age at the Primary Educational Stage (Years 1-6 of compulsory education)

Key Stage 2

Core subjects	Minimum Time allocated in hours/minutes per week
English	8 hours
Mathematics	6 hours
Science	2.5 hours
Foundation subjects	
Art and design	45 mins
Computing	1 hour
Design and technology	45 mins
Languages (Spanish) * KS2 only	45 mins
Life Skills	45 mins
Music	1 hour
Physical education	1 hour
Religious education	1 hour
Social Studies	2.5 hours
Total number of hours	**26 hours**

4. Inclusion

Setting suitable challenges

4. 1   Teachers should set high expectations for every student. They should plan stretching work for students whose attainment is significantly above the expected standard. They have an even greater obligation to plan lessons for students who have low levels of prior attainment or come from disadvantaged backgrounds. Teachers should use appropriate assessment to set targets which are deliberately ambitious.

Responding to students' needs and overcoming potential barriers for individuals and groups of students

4. 2   Teachers should take account of their duties under equal opportunities legislation that covers race, disability, sex, religion or belief, sexual orientation, pregnancy and maternity, and gender reassignment.

4. 3   A wide range of students have special educational needs, many of whom also have disabilities. Lessons should be planned to ensure that there are no barriers to every student achieving. In many cases, such planning will mean that these students will be able to study the full national curriculum. The Interim SEN Code of Practice includes advice on approaches to identification of need which can support this. A minority of students will need access to specialist equipment and different approaches. The Interim SEN Code of Practice outlines what needs to be done for them.

4. 4   With the right teaching, that recognises their individual needs, many disabled students may have little need for additional resources beyond the aids which they use as part of their daily life. Teachers must plan lessons so that these students can study every national curriculum subject. Potential areas of difficulty should be identified and addressed at the outset of work.

4. 5   Teachers must also take account of the needs of students whose first language is not English. Monitoring of progress should take account of the students' age, length of time in this country, previous educational experience and ability in other languages.

4. 6   The ability of students for whom English is an additional language to take part in the national curriculum may be in advance of their communication skills in English. Teachers should plan teaching opportunities to help students develop their English and should aim to provide the support students need to take part in all subjects.

5. Numeracy and mathematics

5. 1   Teachers should use every relevant subject to develop students' mathematical fluency. Confidence in numeracy and other mathematical skills is a precondition of success across the national curriculum.

5. 2   Teachers should develop students' numeracy and mathematical reasoning in all subjects so that they understand and appreciate the importance of mathematics. Students should be taught to apply arithmetic fluently to problems, understand and use measures, make estimates and sense check their work. Students should apply their geometric and algebraic understanding, and relate their understanding of probability to the notions of risk and uncertainty. They should also understand the cycle of collecting, presenting and analysing data. They should be taught to apply their mathematics to both routine and non-routine problems, including breaking down more complex problems into a series of simpler steps.

6. Language and literacy

6. 1   Teachers should develop students' spoken language, reading, writing and vocabulary as integral aspects of the teaching of every subject. English is both a subject in its own right and the medium for teaching; for students, understanding the language provides access to the whole curriculum. Fluency in the English language is an essential foundation for success in all subjects.

Spoken language

6. 2   Students should be taught to speak clearly and convey ideas confidently using Standard English. They should learn to justify ideas with reasons; ask questions to check understanding; develop vocabulary and build knowledge; negotiate; evaluate and build on the ideas of others; and select the appropriate register for effective communication. They should be taught to give well-structured descriptions and explanations and develop their understanding through speculating, hypothesising and exploring ideas. This will enable them to clarify their thinking as well as organise their ideas for writing.

Reading and writing

6. 3   Teachers should develop students' reading and writing in all subjects to support their acquisition of knowledge. Students should be taught to read fluently, understand extended prose (both fiction and non-fiction) and be encouraged to read for pleasure. Schools should do everything to promote wider reading. They should provide library facilities and set ambitious expectations for reading at home. Students should develop the stamina and skills to write at length, with accurate spelling and punctuation. They should be taught the correct use of grammar. They should build on what they have been taught to expand the range of their writing and the variety of the grammar they use. The writing they do should include narratives, explanations, descriptions, comparisons, summaries and evaluations: such writing supports them in rehearsing, understanding and consolidating what they have heard or read.

Vocabulary development

6. 4   Students' acquisition and command of vocabulary are key to their learning and progress across the whole curriculum. Teachers should therefore develop vocabulary actively, building systematically on students' current knowledge. They should increase students' store of words in general; simultaneously, they should also make links between known and new vocabulary and discuss the shades of meaning in similar words. In this way, students expand the vocabulary choices that are available to them when they write. In addition, it is vital for students' comprehension that they understand the meanings of words they meet in their reading across all subjects, and older students should be taught the meaning of instruction verbs that they may meet in examination questions. It is particularly important to induct students into the language which defines each subject in its own right, such as accurate mathematical and scientific language.

7. Programmes of study and attainment targets

7.1   The following pages set out the statutory programmes of study and attainment targets for all the subjects taught at key stages 1 and 2. Schools are not required by law to teach the example content in [square brackets] or the content indicated as being 'non-statutory'.

English programmes of study: key stages 1 and 2

National curriculum in England

Adapted for the Cayman Islands

August 2019

Purpose of study

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

Aims

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

- read easily, fluently and with good understanding

- develop the habit of reading widely and often, for both pleasure and information

- acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language

- to become active participants in their own learning by helping to establish learning success criteria, understanding and utilising metacognitive strategies, critical thinking, as well as using and responding to feedback from teachers and peers

- appreciate our rich and varied literary heritage

- write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences

- use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas

- are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.

Spoken language

The national curriculum for English reflects the importance of spoken language in students' development across the whole curriculum – cognitively, socially and linguistically. Spoken language underpins the development of reading and writing. The quality and variety of language that students hear and speak are vital for developing their vocabulary and grammar and their understanding for reading and writing. Teachers should therefore ensure the continual development of students' confidence and competence in spoken language and listening skills. Students should develop a capacity to explain their understanding of texts and other reading, and to prepare their ideas before they write.

They must be assisted in making their thinking clear to themselves as well as to others and teachers should ensure that students build secure foundations by using discussion to probe and remedy their misconceptions. Students should also be taught to understand and use the conventions for discussion and debate.

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

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

Reading

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

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

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

An essential pre-requisite to skilled word reading is the development of phonological awareness. Phonological awareness is the ability to manipulate not only phonemes (the individual sounds in spoken words) but larger spoken units such as syllables, words, onsets and rimes.

Phonological/Phonemic awareness is the single most reliable predictor of future reading success, hence it is crucial that all students acquire competence in these early literacy skills. Formal instruction in phonological/phonemic awareness begins in Reception and continues throughout Key Stage 1 depending on students' learning needs.

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

Good comprehension draws from linguistic knowledge (in particular of vocabulary and grammar) and on knowledge of the world. Comprehension skills develop through students' experience of high-quality discussion with the teacher, as well as from reading and discussing a range of stories, poems and non-fiction. All students must be encouraged to read widely across both fiction and non-fiction to develop their knowledge of themselves

and the world in which they live, to establish an appreciation and love of reading, and to gain knowledge across the curriculum. Reading widely and often increases students' vocabulary because they encounter words they would rarely hear or use in everyday speech. Reading also feeds students' imagination and opens up a treasure-house of wonder and joy for curious young minds.

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

Writing

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

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

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

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

Spelling, vocabulary, grammar, punctuation and glossary

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

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

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

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

School curriculum

The programmes of study for English are set out year-by-year for key stage 1 and two-yearly for key stage 2. The single year blocks at key stage 1 reflect the rapid pace of development in word reading during these two years. Schools are, however, only required to teach the relevant programme of study by the end of the key stage. Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study. In addition, schools can introduce key stage content during an earlier key stage if appropriate. All schools are also required to set out their school curriculum for English on a year-by-year basis and make this information available online.

Attainment targets

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

Spoken language – years 1 to 6

Spoken language

Statutory requirements

Students 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 e.g. Standard English and Caymanian English dialect

Notes and guidance

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

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

Attention should also be paid to increasing students' vocabulary, ranging from describing their immediate world and feelings to developing a broader, deeper and richer vocabulary to discuss abstract concepts and a wider range of topics, and to enhancing their knowledge about language as a whole.

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

Key stage 1 – year 1

During year 1, teachers should build on work from the Early Years Foundation Stage, making sure that students can sound and blend unfamiliar printed words quickly and accurately using the phonemic awareness, phonic knowledge and skills that they have already learnt. Teachers should also ensure that students continue to learn new grapheme-phoneme correspondences (GPCs) and revise and consolidate those learnt earlier. The understanding that the letter(s) on the page represent the sounds in spoken words should underpin students' reading and spelling of all words. This includes common words containing unusual GPCs. The term 'common exception words' is used throughout the programmes of study for such words.

Alongside this knowledge of GPCs, students need to develop the skill of blending the sounds into words for reading and establish the habit of applying this skill whenever they encounter new words. This will be supported by practice in reading texts consistent with their developing phonic knowledge and skill and their knowledge of common exception words. At the same time they will need to hear, share and discuss a wide range of high-quality texts to develop a love of reading and broaden their vocabulary.

Students should be helped to read words without overt sounding and blending after a few encounters as well as utilize other word solving strategies such as checking for meaning, structure and visual cues (MSV) Those who are slow to develop this skill should have extra practice.

Students' writing during year 1 will generally develop at a slower pace than their reading. This is because they need to encode the sounds they hear in words (spelling skills), develop the physical skill needed for handwriting, and learn how to organise their ideas in writing.

Students entering year 1 who have not yet met the early learning goals for literacy should continue to follow their school's curriculum for the Early Years Foundation Stage to develop their word reading, spelling and language skills. However, these students should follow the year 1 programme of study in terms of the texts they listen to and discuss, so that they develop their vocabulary and understanding of grammar, as well as their knowledge more generally across the curriculum. If they are still struggling to decode and spell, they need to be taught to do this urgently through a rigorous and systematic phonics programme so that they catch up rapidly.

Teachers should ensure that their teaching develops students' oral vocabulary as well as their ability to understand and use a variety of grammatical structures, giving particular support to students whose oral language skills are insufficiently developed.

Year 1 programme of study

Reading – word reading

Statutory requirements

Students should be taught to:

- 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 texts 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 texts to build up their fluency and confidence in word reading.

Notes and guidance

Students should revise and consolidate the GPCs and the common exception words taught in Reception. As soon as they can read words comprising the year 1 GPCs accurately and speedily, they should move on to the year 2 programme of study for word reading.

The number, order and choice of exception words taught will vary according to the phonics programme being used. Ensuring that students are aware of the GPCs they contain, however unusual these are, supports spelling later.

Young readers encounter words that they have not seen before much more frequently than experienced readers do, and they may not know the meaning of some of these. Practice at reading such words by sounding and blending and utilizing the MSV strategies can provide opportunities not only for students to develop confidence in their decoding skills, but also for teachers to explain the meaning and thus develop students' vocabulary.

Notes and guidance

Students should be taught how to read words with suffixes by being helped to build on the root words that they can read already. Students' reading and re-reading of texts that are closely matched to their developing phonic knowledge and knowledge of common exception words supports their fluency, as well as increasing their confidence in their reading skills. Fluent word reading greatly assists comprehension, especially when students come to read longer texts.

Reading – comprehension

Statutory requirements

Students should be taught to:

- 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 texts 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.

Notes and guidance

Students should have extensive experience of listening to, sharing and discussing a wide range of high-quality texts with the teacher, other adults and each other to engender a love of reading at the same time as they are reading independently.

Students' vocabulary should be developed when they listen to texts read aloud and when they discuss what they have heard. Such vocabulary can also feed into their writing.
Knowing the meaning of more words increases students' chances of understanding when they read by themselves. The meaning of some new words should be introduced to students before they start to read on their own, so that these unknown words do not hold up their comprehension.

However, once students have already decoded words successfully, the meaning of those that are new to them can be discussed with them, so contributing to developing their early skills of inference. By listening frequently to stories, poems and non-fiction that they cannot yet read for themselves, students begin to understand how written language can be structured in order, for example, to build surprise in narratives or to present facts in non-fiction. Listening to and discussing information texts and other non-fiction establishes the foundations for their learning in other subjects. Students should be shown some of the processes for finding out information.

Through listening, students also start to learn how language sounds and increase their vocabulary and awareness of grammatical structures. In due course, they will be able to draw on such grammar in their own writing.

Rules for effective discussions should be agreed with and demonstrated for pupils. They should help to develop and evaluate them, with the expectation that everyone takes part. Students should be helped to consider the opinions of others.

Role-play can help students to identify with and explore characters and to try out the language they have listened to.

Writing – transcription

Statutory requirements

Spelling (see English Appendix 1)

Students should be taught to:

- spell:
    - words containing each of the 40+ phonemes already taught
    - common exception words
    - the days of the week

Statutory requirements

- 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, eating, quicker, quickest]
- apply simple spelling rules and guidance, as listed in English Appendix 1
- write from memory simple sentences dictated by the teacher that include words using the GPCs and common exception words taught so far.

Notes and guidance

Reading should be taught alongside spelling, so that students understand that they can read back words they have spelt.

Students should be shown how to segment spoken words into individual phonemes and then how to represent the phonemes by the appropriate grapheme(s). It is important to recognise that phoneme-grapheme correspondences (which underpin spelling) are more variable than grapheme-phoneme correspondences (which underpin reading). For this reason, students need to do much more word-specific rehearsal for spelling than for reading.

At this stage students will be spelling some words in a phonically plausible way, even if sometimes incorrectly. Misspellings of words that students have been taught to spell should be corrected; other misspelt words should be used to teach students about alternative ways of representing those sounds.

Writing simple dictated sentences that include words taught so far gives students opportunities to apply and practise their spelling.

Statutory requirements

Handwriting

Students should be taught to:

- 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.

Notes and guidance

Handwriting requires frequent and discrete, direct teaching. Students should be able to form letters correctly and confidently. The size of the writing implement (pencil, pen) should not be too large for a young pupil's hand. Whatever is being used should allow the student to hold it easily and correctly so that bad habits are avoided.

Left-handed students should receive specific teaching to meet their needs.

During Year 1 students learn flick out stokes to join with lead in strokes in Year 2. (See Cayman Islands Schools Handwriting Policy)

Writing – composition

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

At the beginning of year 1, not all students will have the spelling and handwriting skills they need to write down everything that they can compose out loud.

Students should understand, through demonstration, the skills and processes essential to writing: that is, thinking aloud as they collect ideas, drafting, and re-reading to check t h a t their meaning is clear.

Writing – vocabulary, grammar and punctuation

Statutory requirements

Students should be taught to:

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

Notes and guidance

Students should be taught to recognise sentence boundaries in spoken sentences and to use the vocabulary listed in English Appendix 2 ('Terminology for students') when their writing is discussed.

Students should begin to use some of the distinctive features of Standard English in their writing. 'Standard English' is defined in the Glossary.

Key stage 1 – year 2

By the beginning of year 2, students should be able to read all common graphemes. They should be able to read unfamiliar words containing these graphemes, accurately and without undue hesitation, by sounding them out in texts that are matched closely to each pupil's level of word reading knowledge. They should also be able to read many common words containing GPCs taught so far [for example, shout, hand, stop, or dream], without needing to blend the sounds out loud first. Students' reading of common exception words [for example, you, could, many, or people], should be secure. Students will increase their fluency by being able to read these words easily and automatically. Finally, students should be able to retell some familiar stories that have been read to and discussed with them or that they have acted out during year 1.

During year 2, teachers should continue to focus on establishing students' accurate and speedy word reading skills. They should also make sure that students listen to and discuss a wide range of stories, poems, plays and information texts; this should include whole texts. The sooner that students can read well and do so frequently, the sooner they will be able to increase their vocabulary, comprehension and their knowledge across the wider curriculum.

In writing, students at the beginning of year 2 should be able to compose individual sentences orally and then write them down. They should be able to spell correctly many of the words covered in year 1 (see English Appendix 1). They should also be able to make phonically plausible attempts to spell words they have not yet learnt. Finally, they should be able to form individual letters correctly, so establishing good handwriting habits from the beginning.

It is important to recognise that students begin to meet extra challenges in terms of spelling during year 2. Increasingly, they should learn that there is not always an obvious connection between the way a word is said and the way it is spelt. Variations include different ways of spelling the same sound, the use of so-called silent letters and groups of letters in some words and, sometimes, spelling that has become separated from the way that words are now pronounced, such as the 'le' ending in table. Students' motor skills also need to be sufficiently advanced for them to write down ideas that they may be able to compose orally. In addition, writing is intrinsically harder than reading: students are likely to be able to read and understand more complex writing (in terms of its vocabulary and structure) than they are capable of producing themselves.

For students who do not have the phonic knowledge and skills they need for year 2, teachers should use the year 1 programmes of study for word reading and spelling so that students' word reading skills catch up. However, teachers should use the year 2 programme of study for comprehension so that these students hear and talk about new texts, poems, other writing, and vocabulary with the rest of the class.

Year 2 programme of study

Reading – word reading

Statutory requirements

Students should be taught to:

- 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 texts closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation

- re-read these texts to build up their fluency and confidence in word reading.

Notes and guidance

Students should revise and consolidate the GPCs and the common exception words taught in year 1. The exception words taught will vary slightly, depending on the phonics programme being used. As soon as students can read words comprising the year 2 GPCs accurately and speedily, they should move on to the years 3 and 4 programme of study for word reading.

When students are taught how to read longer words, they should be shown syllable boundaries and how to read each syllable separately before they combine them to read the word.

Students should be taught how to read suffixes by building on the root words that they have already learnt. The whole suffix should be taught as well as the letters that make it up.

Students who are still at the early stages of learning to read should have ample practice in reading texts that are closely matched to their developing phonic knowledge and knowledge of common exception words. As soon as the decoding of most regular words and common exception words is embedded fully, the range of texts that students can read independently will expand rapidly. Students should have opportunities to exercise choice in selecting texts and be taught how to do so.

Reading – comprehension

Statutory requirements

Students should be taught to:

- 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 texts 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 texts 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 texts 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 texts, 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 texts, poems and other material, both those that they listen to and those that they read for themselves.

Notes and guidance

Students should be encouraged to read all the words in a sentence and to do this accurately, so that their understanding of what they read is not hindered by imprecise decoding (for example, by reading 'place' instead of 'palace').

Notes and guidance

Students should monitor what they read, checking that the word they have decoded fits in with what else they have read and makes sense in the context of what they already know about the topic.

The meaning of new words should be explained to students within the context of what they are reading, and they should be encouraged to use morphology (such as prefixes) to work out unknown words.

Students should learn about cause and effect in both narrative and non-fiction (for example, what has prompted a character's behaviour in a story; why certain dates are commemorated annually). 'Thinking aloud' when reading to students may help them to understand what skilled readers do.

Deliberate steps should be taken to increase students' vocabulary and their awareness of grammar so that they continue to understand the differences between spoken and written language.

Discussion should be demonstrated to pupils. They should be guided to participate in it and they should be helped to consider the opinions of others. They should receive feedback on their discussions.

Role-play and other drama techniques can help students to identify with and explore characters. In these ways, they extend their understanding of what they read and have opportunities to try out the language they have listened to.

Writing – transcription

Statutory requirements

Spelling (see English Appendix 1)

Students should be taught to:

- 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

Statutory requirements

- apply spelling rules and guidance, as listed in English Appendix 1
- write from memory simple sentences dictated by the teacher that include words using the GPCs, common exception words and punctuation taught so far.

Notes and guidance

In year 2, students move towards more word-specific knowledge of spelling, including homophones. The process of spelling should be emphasised: that is, that spelling involves segmenting spoken words into phonemes and then representing all the phonemes by graphemes in the right order. Students should do this both for single-syllable and multi-syllabic words.

At this stage children's spelling should be phonically plausible, even if not always correct. Misspellings of words that students have been taught to spell should be corrected; other misspelt words can be used as an opportunity to teach students about alternative ways of representing those sounds.

Students should be encouraged to apply their knowledge of suffixes from their word reading to their spelling. They should also draw from and apply their growing knowledge of word and spelling structure, as well as their knowledge of root words.

Statutory requirements

Handwriting

Students should be taught to:

- 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.

Notes and guidance

Students should revise and practise correct letter formation frequently. They should be taught to write with a joined style as soon as they can form letters securely with the correct orientation.

In Year 2 students learn lead in stokes, which join to the flicks out (See Cayman Islands Schools Handwriting Policy). By the end of KS2 students should be able to write in a consistent, fluent joined script.

Writing – composition

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Reading and listening to whole texts, not simply extracts, helps students to increase their vocabulary and grammatical knowledge, including their knowledge of the vocabulary and grammar of Standard English. These activities also help them to understand how different types of writing, including narratives, are structured. All these can be drawn on for their writing.

Students should understand, through being shown these, the skills and processes essential to writing: that is, thinking aloud as they collect ideas, drafting, and re-reading to check their meaning is clear.

Drama and role-play can contribute to the quality of students' writing by providing opportunities for students to develop and order their ideas through playing roles and improvising scenes in various settings.

Students might draw on and use new vocabulary from their reading, their discussions about it (one-to-one and as a whole class) and from their wider experiences.

Writing – vocabulary, grammar and punctuation

Statutory requirements

Students should be taught to:

- develop their understanding of the concepts set out in <u>English Appendix 2</u> 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.

Notes and guidance

The terms for discussing language should be embedded for students in the course of discussing their writing with them. Their attention should be drawn to the technical terms they need to learn.

Lower key stage 2 – years 3 and 4

By the beginning of year 3, students should be able to read texts written at an age-appropriate interest level. They should be able to read them accurately and at a speed that is sufficient for them to focus on understanding what they read rather than on decoding individual words. They should be able to decode most new words outside their spoken vocabulary, making a good approximation to the word's pronunciation. As their decoding skills become increasingly secure, teaching should be directed more towards developing their vocabulary and the breadth and depth of their reading, making sure that they become independent, fluent and enthusiastic readers who read widely and frequently. They should be developing their understanding and enjoyment of stories, poetry, plays and non-fiction, and learning to read silently. They should also be developing their knowledge and skills in reading non-fiction about a wide range of subjects. They should be learning to justify their views about what they have read: with support at the start of year 3 and increasingly independently by the end of year 4.

Students should be able to write down their ideas with a reasonable degree of accuracy and with good sentence punctuation. Teachers should therefore be consolidating students' writing skills, their vocabulary, their grasp of sentence structure and their knowledge of linguistic terminology. Teaching them to develop as writers involves teaching them to enhance the effectiveness of what they write as well as increasing their competence. Teachers should make sure that students build on what they have learnt, particularly in terms of the range of their writing and the more varied grammar, vocabulary and narrative structures from which they can draw to express their ideas. Students should be beginning to understand how writing can be different from speech. Joined handwriting should be the norm; students should be able to use it fast enough to keep pace with what they want to say.

Students' spelling of common words should be correct, including common exception words and other words that they have learnt (see English Appendix 1). Students should spell words as accurately as possible using their phonic knowledge and other knowledge of spelling, such as morphology and etymology.

Most students will not need further direct teaching of word reading skills: they are able to decode unfamiliar words accurately, and need very few repeated experiences of this before the word is stored in such a way that they can read it without overt sound-blending. They should demonstrate understanding of figurative language, distinguish shades of meaning among related words and use age-appropriate, academic vocabulary.

As in key stage 1, however, students who are still struggling to decode need to be taught to do this urgently through a rigorous and systematic phonics programme so that they catch up rapidly with their peers. If they cannot decode independently and

fluently, they will find it increasingly difficult to understand what they read and to write down what they want to say. As far as possible, however, these students should follow the year 3 and 4 programme of study in terms of listening to new texts, hearing and learning new vocabulary and grammatical structures, and discussing these.

Specific requirements for students to discuss what they are learning and to develop their wider skills in spoken language form part of this programme of study. In years 3 and 4, students should become more familiar with and confident in using language in a greater variety of situations, for a variety of audiences and purposes, including through drama, formal presentations and debate.

Years 3 and 4 programme of study

Reading – word reading

Statutory requirements

Students should be taught to:

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

- read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.

Notes and guidance

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

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

Reading – comprehension

Statutory requirements

Students should be taught to:

- develop positive attitudes to reading and understanding of what they read by:
    - listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference texts or textbooks
    - reading texts 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 texts, including fairy stories, myths and legends, and retelling some of these orally
    - identifying themes and conventions in a wide range of texts

Statutory requirements

- preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action

- discussing words and phrases that capture the reader's interest and imagination

- recognising some different forms of poetry [for example, free verse, narrative poetry]

- understand what they read, in texts 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 texts that are read to them and those they can read for themselves, taking turns and listening to what others say.

Notes and guidance

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

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

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

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

Notes and guidance

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

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

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

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

Writing – transcription

Statutory requirements

Spelling (see English Appendix 1)

Students should be taught to:

- use further prefixes and suffixes and understand how to add them (English Appendix 1)

- spell further homophones

- spell words that are often misspelt (English Appendix 1)

- place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]

- use the first two or three letters of a word to check its spelling in a dictionary

- write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.

Notes and guidance

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

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

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

Statutory requirements

Handwriting

Students should be taught to:

- use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined

- increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

Notes and guidance

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

In Years 3-4 students progress to writing in cursive.Teachers should model cursive writing throughout the school day, for e.g. giving spelling lists in cursive, (See Cayman Islands Schools' Handwriting Policy)

Writing – composition

Statutory requirements

Students should be taught to:

- plan their writing by:
  - discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
  - discussing and recording ideas
- draft and write by:
  - composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2)
  - organising paragraphs around a theme
  - in narratives, creating settings, characters and plot
  - in non-narrative material, using simple organisational devices [for example, headings and sub-headings]
- evaluate and edit by:
  - assessing the effectiveness of their own and others' writing and suggesting improvements
  - proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences
- proof-read for spelling and punctuation errors
- read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.

Notes and guidance

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

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

Writing – vocabulary, grammar and punctuation

Statutory requirements

Students should be taught to:

- develop their understanding of the concepts set out in English Appendix 2 by:
  - extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although
  - using the present perfect form of verbs in contrast to the past tense
  - choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition
  - using conjunctions, adverbs and prepositions to express time and cause
  - using fronted adverbials
  - learning the grammar for years 3 and 4 in English Appendix 2
- indicate grammatical and other features by:
  - using commas after fronted adverbials
  - indicating possession by using the possessive apostrophe with plural nouns
  - using and punctuating direct speech
- use and understand the grammatical terminology in English Appendix 2 accurately and appropriately when discussing their writing and reading.

Notes and guidance

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

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

Upper key stage 2 – years 5 and 6

By the beginning of year 5, students should be able to read aloud a wider range of poetry and texts written at an age-appropriate interest level with accuracy and at a reasonable speaking pace. They should be able to read most words effortlessly and to work out how to pronounce unfamiliar written words with increasing automaticity. If the pronunciation sounds unfamiliar, they should ask for help in determining both the meaning of the word and how to pronounce it correctly.

They should be able to prepare readings, with appropriate intonation to show their understanding, and should be able to summarise and present a familiar story in their own words. They should be reading widely and frequently, outside as well as in school, for pleasure and information. They should be able to read silently, with good understanding, inferring the meanings of unfamiliar words, and then discuss what they have read.

Students should be able to write down their ideas quickly. Their grammar and punctuation should be broadly accurate. Students' spelling of most words taught so far should be accurate and they should be able to spell words that they have not yet been taught by using what they have learnt about how spelling works in English.

During years 5 and 6, teachers should continue to emphasise students' enjoyment and understanding of language, especially vocabulary, to support their reading and writing. Students' knowledge of language, gained from stories, plays, poetry, non-fiction and textbooks, will support their increasing fluency as readers, their facility as writers, and their comprehension. As in years 3 and 4, students should be taught to enhance the effectiveness of their writing as well as their competence.

It is essential that students whose decoding skills are poor are taught through a rigorous and systematic phonics programme so that they catch up rapidly with their peers in terms of their decoding and spelling. However, as far as possible, these students should follow the upper key stage 2 programme of study in terms of listening to texts and other writing that they have not come across before, hearing and learning new vocabulary and grammatical structures, and having a chance to talk about all of these.

By the end of year 6, students' reading and writing should be sufficiently fluent and effortless for them to manage the general demands of the curriculum in year 7, across all subjects and not just in English, but there will continue to be a need for students to learn subject- specific vocabulary. They should be able to reflect their understanding of the audience for and purpose of their writing by selecting appropriate vocabulary and grammar. Teachers should prepare students for secondary education by ensuring that they can consciously control sentence structure in their writing and understand why sentences are constructed as they are. Students should understand nuances in vocabulary choice and age-appropriate, academic vocabulary. This involves consolidation, practice and discussion of language.

Specific requirements for students to discuss what they are learning and to develop their wider skills in spoken language form part of this programme of study. In years 5 and 6, students' confidence, enjoyment and mastery of language should be extended through public speaking, performance and debate.

Years 5 and 6 programme of study

Reading – word reading

Statutory requirements

Students should be taught to:

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

Notes and guidance

At this stage, there should be no need for further direct teaching of word reading skills for almost all pupils. If students are struggling or failing in this, the reasons for this should be investigated. It is imperative that students are taught to read during their last two years at primary school if they enter year 5 not being able to do so.

Students should be encouraged to work out any unfamiliar word. They should focus on all the letters in a word so that they do not, for example, read 'invitation' for 'imitation' simply because they might be more familiar with the first word. Accurate reading of individual words, which might be key to the meaning of a sentence or paragraph, improves comprehension.

When teachers are reading with or to pupils, attention should be paid to new vocabulary – both a word's meaning(s) and its correct pronunciation.

Reading – comprehension

Statutory requirements

Students should be taught to:

- 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 texts or textbooks
    - reading texts that are structured in different ways and reading for a range of purposes
    - increasing their familiarity with a wide range of texts, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and texts from other cultures and traditions

Statutory requirements

- recommending texts 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 texts

- 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 texts 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.

Notes and guidance

Even though students can now read independently, reading aloud to them should include whole texts so that they meet texts and authors that they might not choose to read themselves.

The knowledge and skills that students need in order to comprehend are very similar at different ages. Students should continue to apply what they have already learnt to more complex writing.

Students should be taught to recognise themes in what they read, such as loss or heroism. They should have opportunities to compare characters, consider different accounts of the same event and discuss viewpoints (both of authors and of fictional characters), within a text and across more than one text.

They should continue to learn the conventions of different types of writing, such as the use of the first person in writing diaries and autobiographies.

Students should be taught the technical and other terms needed for discussing what they hear and read, such as metaphor, simile, analogy, imagery, style and effect.

In using reference texts, students need to know what information they need to look for before they begin and need to understand the task. They should be shown how to use contents pages and indexes to locate information.

The skills of information retrieval that are taught should be applied, for example, in reading history, geography and science textbooks, and in contexts where students are genuinely motivated to find out information, for example, reading information leaflets before a gallery or museum visit or reading a theatre programme or review. Teachers should consider making use of any library services and expertise to support this.

Students should have guidance about and feedback on the quality of their explanations and contributions to discussions.

Students should be shown how to compare characters, settings, themes and other aspects of what they read.

Writing – transcription

Statutory requirements

Spelling (see English Appendix 1)

Students should be taught to:

- 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.

Notes and guidance

As in earlier years, students should continue to be taught to understand and apply the concepts of word structure so that they can draw on their knowledge of morphology and etymology to spell correctly.

Statutory requirements

Handwriting and presentation

Students should be taught to:

- 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.

Notes and guidance

Students should continue to practise handwriting and be encouraged to increase the speed of it, so that problems with forming letters do not get in the way of their writing down what they want to say. They should be clear about what standard of handwriting is appropriate for a particular task, for example, quick notes or a final handwritten version. They should also be taught to use an unjoined style, for example, for labelling a diagram or data, writing an email address, or for algebra and capital letters, for example, for filling in a form.

In Years 5-6 students should be writing in cursive for most writing tasks. (See Cayman Islands Schools Handwriting Policy)

Writing – composition

Statutory requirements

Students should be taught to:

- 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 students 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

Statutory requirements
- proof-read for spelling and punctuation errors   - perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear

Notes and guidance

Students should understand, through being shown, the skills and processes essential for writing: that is, thinking aloud to generate ideas, drafting, and re-reading to check that the meaning is clear.

Writing – vocabulary, grammar and punctuation

Statutory requirements

Students should be taught to:

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

Notes and guidance

Students should continue to add to their knowledge of linguistic terms, including those to describe grammar, so that they can discuss their writing and reading.

English Appendix 1: Spelling

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

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

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

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

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

In this spelling appendix, the left-hand column is statutory.

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

Spelling – work for year 1

Revision of reception work

Statutory requirements

The boundary between revision of work covered in Reception and the introduction of new work may vary according to the programme used, but basic revision should include:

- all letters of the alphabet and the sounds which they most commonly represent
- consonant digraphs which have been taught and the sounds which they represent
- vowel digraphs which have been taught and the sounds which they represent
- the process of segmenting spoken words into sounds before choosing graphemes to represent the sounds
- words with adjacent consonants
- guidance and rules which have been taught

Statutory requirements	Rules and guidance	Example words
The sounds /f/, /l/, /s/, /z/ and /k/ spelt ff, ll, ss, zz and ck	The /f/, /l/, /s/, /z/ and /k/ sounds are usually spelt as **ff**, **ll**, **ss**, **zz** and **ck** if they come straight after a single vowel letter in short words. **Exceptions**: if, pal, us, bus, yes.	off, well, miss, buzz, back
The /ŋ/ sound spelt n before k		bank, think, honk, sunk
Division of words into syllables	Each syllable is like a 'beat' in the spoken word. Words of more than one syllable often have an unstressed syllable in which the vowel sound is unclear.	pocket, rabbit, carrot, thunder, sunset

Statutory requirements	Rules and guidance	Example words
-tch	The /tʃ/ sound is usually spelt as **tch** if it comes straight after a single vowel letter. **Exceptions**: rich, which, much, such.	catch, fetch, kitchen, notch, hutch
The /v/ sound at the end of words	English words hardly ever end with the letter **v**, so if a word ends with a /v/ sound, the letter **e** usually needs to be added after the 'v'.	have, live, give
Adding s and es to words (plural of nouns and the third person singular of verbs)	If the ending sounds like /s/ or /z/, it is spelt as **–s**. If the ending sounds like /ɪz/ and forms an extra syllable or 'beat' in the word, it is spelt as **–es**.	cats, dogs, spends, rocks, thanks, catches
Adding the endings –ing, –ed and –er to verbs where no change is needed to the root word	**–ing** and **–er** always add an extra syllable to the word and **–ed** sometimes does. The past tense of some verbs may sound as if it ends in /ɪd/ (extra syllable), /d/ or /t/ (no extra syllable), but all these endings are spelt **–ed**. If the verb ends in two consonant letters (the same or different), the ending is simply added on.	hunting, hunted, hunter, buzzing, buzzed, buzzer, jumping, jumped, jumper
Adding –er and –est to adjectives where no change is needed to the root word	As with verbs (see above), if the adjective ends in two consonant letters (the same or different), the ending is simply added on.	grander, grandest, fresher, freshest, quicker, quickest

Vowel digraphs and trigraphs

Some may already be known, depending on the programmes used in Reception, but some will be new.

Vowel digraphs and trigraphs	Rules and guidance	Example words
ai, oi	The digraphs ai and oi are virtually never used at the end of English words.	rain, wait, train, paid, afraid oil, join, coin, point, soil
ay, oy	**ay** and **oy** are used for those sounds at the end of words and at the end of syllables.	day, play, say, way, stay boy, toy, enjoy, annoy
a–e		made, came, same, take, safe
e–e		these, theme, complete
i–e		five, ride, like, time, side
o–e		home, those, woke, hope, hole
u–e	Both the /u:/ and /ju:/ ('oo' and 'yoo') sounds can be spelt as **u–e**.	June, rule, rude, use, tube, tune
ar		car, start, park, arm, garden
ee		see, tree, green, meet, week
ea (/i:/)		sea, dream, meat, each, read (present tense)
ea (/ɛ/)		head, bread, meant, instead, read (past tense)
er (/ɜ:/)		(stressed sound): her, term, verb, person
er (/ə/)		(unstressed *schwa* sound): better, under, summer, winter, sister
ir		girl, bird, shirt, first, third
ur		turn, hurt, church, burst, Thursday

Vowel digraphs and trigraphs	Rules and guidance	Example words
oo (/u:/)	Very few words end with the letters **oo**, although the few that do are often words that primary children in year 1 will encounter, for example, *zoo*	food, pool, moon, zoo, soon
oo (/ʊ/)		book, took, foot, wood, good
oa	The digraph **oa** is very rare at the end of an English word.	boat, coat, road, coach, goal
oe		toe, goes
ou	The only common English word ending in **ou** is *you*.	out, about, mouth, around, sound
ow (/aʊ/) ow (/əʊ/) ue ew	Both the /u:/ and /ju:/ ('oo' and 'yoo') sounds can be spelt as **u–e**, **ue** and **ew**. If words end in the /oo/ sound, **ue** and **ew** are more common spellings than **oo**.	now, how, brown, down, town own, blow, snow, grow, show blue, clue, true, rescue, Tuesday new, few, grew, flew, drew, threw
ie (/aɪ/)		lie, tie, pie, cried, tried, dried
ie (/i:/)		chief, field, thief
igh		high, night, light, bright, right
or		for, short, born, horse, morning
ore		more, score, before, wore, shore
aw		saw, draw, yawn, crawl
au		author, August, dinosaur, astronaut
air		air, fair, pair, hair, chair
ear		dear, hear, beard, near, year
ear (/ɛə/)		bear, pear, wear
are (/ɛə/)		bare, dare, care, share, scared

Statutory requirements	Rules and guidance	Example words
Words ending –y (/i:/ or /ɪ/)		very, happy, funny, party, family
New consonant spellings ph and wh	The /f/ sound is not usually spelt as **ph** in short everyday words (e.g. *fat*, *fill*, *fun*).	dolphin, alphabet, phonics, elephant when, where, which, wheel, while
Using k for the /k/ sound	The /k/ sound is spelt as **k** rather than as **c** before **e**, **i** and **y**.	Kent, sketch, kit, skin, frisky
Adding the prefix –un	The prefix **un–** is added to the beginning of a word without any change to the spelling of the root word.	unhappy, undo, unload, unfair, unlock
Compound words	Compound words are two words joined together. Each part of the longer word is spelt as it would be if it were on its own.	football, playground, farmyard, bedroom, blackberry
Common exception words	Students' attention should be drawn to the grapheme- phoneme correspondences that do and do not fit in with what has been taught so far.	the, a, do, to, today, of, said, says, are, were, was, is, his, has, I, you, your, they, be, he, me, she, we, no, go, so, by, my, here, there, where, love, come, some, one, once, ask, friend, school, put, push, pull, full, house, our – and/or others, according to the programme used

Spelling – work for year 2

Revision of work from year 1

As words with new GPCs are introduced, many previously-taught GPCs can be revised at the same time as these words will usually contain them.

New work for year 2

Statutory requirements	Rules and guidance	Example words
The /dʒ/ sound spelt as ge and dge at the end of words, and sometimes spelt as g elsewhere in words before e, i and y	The letter j is never used for the /dʒ/ sound at the end of English words. At the end of a word, the /dʒ/ sound is spelt –**dge** straight after the /æ/, /ɛ/, /ɪ/, /ɒ/, /ʌ/ and /ʊ/ sounds (sometimes called 'short' vowels).	badge, edge, bridge, dodge, fudge
	After all other sounds, whether vowels or consonants, the /dʒ/ sound is spelt as –**ge** at the end of a word.	age, huge, change, charge, bulge, village
	In other positions in words, the /dʒ/ sound is often (but not always) spelt as g before e, i, and y. The /dʒ/ sound is always spelt as j before a, o and u.	gem, giant, magic, giraffe, energy jacket, jar, jog, join, adjust
The /s/ sound spelt c before e, i and y		race, ice, cell, city, fancy
The /n/ sound spelt kn and (less often) gn at the beginning of words	The 'k' and 'g' at the beginning of these words was sounded hundreds of years ago.	knock, know, knee, gnat, gnaw
The /r/ sound spelt wr at the beginning of words	This spelling probably also reflects an old pronunciation.	write, written, wrote, wrong, wrap
The /l/ or /əl/ sound spelt –le at the end of words	The –**le** spelling is the most common spelling for this sound at the end of words.	table, apple, bottle, little, middle

Statutory requirements	Rules and guidance	Example words
The /l/ or /əl/ sound spelt –el at the end of words	The **–el** spelling is much less common than **–le**. The **–el** spelling is used after **m**, **n**, **r**, **s**, **v**, **w** and more often than not after **s**.	camel, tunnel, squirrel, travel, towel, tinsel
The /l/ or /əl/ sound spelt –al at the end of words	Not many nouns end in **–al**, but many adjectives do.	metal, pedal, capital, hospital, animal
Words ending –il	There are not many of these words.	pencil, fossil, nostril
The /aɪ/ sound spelt –y at the end of words	This is by far the most common spelling for this sound at the end of words.	cry, fly, dry, try, reply, July
Adding –es to nouns and verbs ending in –y	The **y** is changed to **i** before **–es** is added.	flies, tries, replies, copies, babies, carries
Adding –ed, –ing, –er and –est to a root word ending in –y with a consonant before it	The **y** is changed to **i** before **–ed**, **–er** and **–est** are added, but not before **–ing** as this would result in **ii**. The only ordinary words with **ii** are *skiing* and *taxiing*.	copied, copier, happier, happiest, cried, replied …**but** copying, crying, replying
Adding the endings –ing, –ed, –er, –est and –y to words ending in –e with a consonant before it	The **–e** at the end of the root word is dropped before **–ing**, **–ed**, **–er**, **–est**, **–y** or any other suffix beginning with a vowel letter is added. **Exception**: *being.*	hiking, hiked, hiker, nicer, nicest, shiny
Adding –ing, –ed, –er, –est and –y to words of one syllable ending in a single consonant letter after a single vowel letter	The last consonant letter of the root word is doubled to keep the /æ/, /ɛ/, /ɪ/, /ɒ/ and /ʌ/ sound (i.e. to keep the vowel 'short'). **Exception**: The letter 'x' is never doubled: *mixing, mixed, boxer, sixes.*	patting, patted, humming, hummed, dropping, dropped, sadder, saddest, fatter, fattest, runner, runny
The /ɔ:/ sound spelt a before l and ll	The **/ɔ:/** sound ('or') is usually spelt as **a** before **l** and **ll**.	all, ball, call, walk, talk, always
The /ʌ/ sound spelt o		other, mother, brother, nothing, Monday

Statutory requirements	Rules and guidance	Example words
The /iː/ sound spelt –ey	The plural of these words is formed by the addition of **–s** (*donkeys*, *monkeys,* etc.).	key, donkey, monkey, chimney, valley
The /ɒ/ sound spelt a after w and qu	**a** is the most common spelling for the /ɒ/ ('h<u>o</u>t') sound after **w** and **qu**.	want, watch, wander, quantity, squash
The /ɜː/ sound spelt or after w	There are not many of these words.	word, work, worm, world, worth
The /ɔː/ sound spelt ar after w	There are not many of these words.	war, warm, towards
The /ʒ/ sound spelt s		television, treasure, usual
The suffixes –ment, –ness, –ful , –less and –ly	If a suffix starts with a consonant letter, it is added straight on to most root words without any change to the last letter of those words. **Exceptions**: (1) *argument*	enjoyment, sadness, careful, playful, hopeless, plainness (plain + ness), badly
	(2) root words ending in –**y** with a consonant before it but only if the root word has more than one syllable.	merriment, happiness, plentiful, penniless, happily
Contractions	In contractions, the apostrophe shows where a letter or letters would be if the words were written in full (e.g. *can't – cannot*). *It's* means *it is* (e.g. *It's* raining) or sometimes *it has* (e.g. *It's* been raining), but *it's* is never used for the possessive.	can't, didn't, hasn't, couldn't, it's, I'll
The possessive apostrophe (singular nouns)		Megan's, Ravi's, the girl's, the child's, the man's
Words ending in –tion		station, fiction, motion, national, section

Statutory requirements	Rules and guidance	Example words
Homophones and near-homophones	It is important to know the difference in meaning between homophones.	there/their/they're, here/hear, quite/quiet, see/sea, bare/bear, one/won, sun/son, to/too/two, be/bee, blue/blew, night/knight
Common exception words	Some words are exceptions in some accents but not in others – e.g. *past*, *last*, *fast*, *path* and *bath* are not exceptions in accents where the **a** in these words is pronounced /æ/, as in *cat*. *Great*, *break* and *steak* are the only common words where the /eɪ/ sound is spelt **ea**.	door, floor, poor, because, find, kind, mind, behind, child, children*, wild, climb, most, only, both, old, cold, gold, hold, told, every, everybody, even, great, break, steak, pretty, beautiful, after, fast, last, past, father, class, grass, pass, plant, path, bath, hour, move, prove, improve, sure, sugar, eye, could, should, would, who, whole, any, many, clothes, busy, people, water, again, half, money, Mr, Mrs, parents, Christmas – and/or others according to programme used. **Note:** 'children' is not an exception to what has been taught so far but is included because of its relationship with 'child'.

Spelling – work for years 3 and 4

Revision of work from years 1 and 2

Pay special attention to the rules for adding suffixes.

New work for years 3 and 4

Statutory requirements	Rules and guidance	Example words
Adding suffixes beginning with vowel letters to words of more than one syllable	If the last syllable of a word is stressed and ends with one consonant letter which has just one vowel letter before it, the final consonant letter is doubled before any ending beginning with a vowel letter is added. The consonant letter is not doubled if the syllable is unstressed.	forgetting, forgotten, beginning, beginner, prefer, preferred

gardening, gardener, limiting, limited, limitation |
| The /ɪ/ sound spelt y elsewhere than at the end of words | These words should be learnt as needed. | myth, gym, Egypt, pyramid, mystery |
| The /ʌ/ sound spelt ou | These words should be learnt as needed. | young, touch, double, trouble, country |
| More prefixes | Most prefixes are added to the beginning of root words without any changes in spelling, but see **in–** below.

Like **un–**, the prefixes **dis–** and **mis–** have negative meanings.

The prefix **in–** can mean both 'not' and 'in'/'into'. In the words given here it means 'not'. | **dis–**: disappoint, disagree, disobey

mis–: misbehave, mislead, misspell (mis + spell)

in–: inactive, incorrect |

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

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

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

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

Word list – years 3 and 4

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

Notes and guidance (non-statutory)

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

Notes and guidance Examples:

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

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

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

- *bicycle* is *cycle* (from the Greek for *wheel*) with **bi–** (meaning 'two') before it.

- *medicine* is related to *medical* so the /s/ sound is spelt as **c**.

- *opposite* is related to *oppose*, so the schwa sound in *opposite* is spelt as **o**.

Spelling – years 5 and 6

Revise work done in previous years

New work for years 5 and 6

Statutory requirements	Rules and guidance	Example words
Endings which sound like /ʃəs/ spelt –cious or –tious	Not many common words end like this. If the root word ends in **–ce**, the /ʃ/ sound is usually spelt as **c** – e.g. *vice – vicious, grace – gracious, space – spacious, malice – malicious.* **Exception**: *anxious*.	vicious, precious, conscious, delicious, malicious, suspicious ambitious, cautious, fictitious, infectious, nutritious
Endings which sound like /ʃəl/	**–cial** is common after a vowel letter and **–tial** after a consonant letter, but there are some exceptions. **Exceptions**: initial, financial, commercial, provincial (the spelling of the last three is clearly related to *finance*, *commerce* and *province*).	official, special, artificial, partial, confidential, essential
Words ending in –ant, –ance/–ancy, –ent, –ence/–ency	Use **–ant** and **–ance/–ancy** if there is a related word with a /æ/ or /eɪ/ sound in the right position; –**ation** endings are often a clue.	observant, observance, (observation), expectant (expectation), hesitant, hesitancy (hesitation), tolerant, tolerance (toleration), substance (substantial)
	Use **–ent** and **–ence/–ency** after soft **c** (/s/ sound), soft **g** (/dʒ/ sound) and **qu**, or if there is a related word with a clear /ɛ/ sound in the right position. There are many words, however, where the above guidance does not help. These words just have to be learnt.	innocent, innocence, decent, decency, frequent, frequency, confident, confidence (confidential) assistant, assistance, obedient, obedience, independent, independence

Statutory requirements	Rules and guidance	Example words
Words ending in –able and –ible Words ending in –ably and –ibly	The **–able/–ably** endings are far more common than the **–ible/–ibly** endings. As with **–ant** and **–ance/–ancy**, the **–able** ending is used if there is a related word ending in **–ation**.	adorable/adorably (adoration), applicable/applicably (application), considerable/considerably (consideration), tolerable/tolerably (toleration)
	If the **–able** ending is added to a word ending in **–ce** or **–ge**, the **e** after the **c** or **g** must be kept as those letters would otherwise have their 'hard' sounds (as in *cap* and *gap*) before the **a** of the **–able** ending.	changeable, noticeable, forcible, legible
	The **–able** ending is usually but not always used if a complete root word can be heard before it, even if there is no related word ending in **–ation**. The first five examples opposite are obvious; in *reliable*, the complete word *rely* is heard, but the **y** changes to **i** in accordance with the rule.	dependable, comfortable, understandable, reasonable, enjoyable, reliable
	The **–ible** ending is common if a complete root word can't be heard before it but it also sometimes occurs when a complete word *can* be heard (e.g. *sensible*).	possible/possibly, horrible/horribly, terrible/terribly, visible/visibly, incredible/incredibly, sensible/sensibly
Adding suffixes beginning with vowel letters to words ending in –fer	The **r** is doubled if the **–fer** is still stressed when the ending is added. The **r** is not doubled if the **–fer** is no longer stressed.	referring, referred, referral, preferring, preferred, transferring, transferred reference, referee, preference, transference
Use of the hyphen	Hyphens can be used to join a prefix to a root word, especially if the prefix ends in a vowel letter and the root word also begins with one.	co-ordinate, re-enter, co-operate, co-own

Statutory requirements	Rules and guidance	Example words
Words with the /iː/ sound spelt ei after c	The 'i before e except after c' rule applies to words where the sound spelt by **ei** is /iː/. **Exceptions**: *protein*, *caffeine*, *seize* (and *either* and *neither* if pronounced with an initial /iː/ sound).	deceive, conceive, receive, perceive, ceiling
Words containing the letter-string ough	**ough** is one of the trickiest spellings in English – it can be used to spell a number of different sounds.	ought, bought, thought, nought, brought, fought rough, tough, enough cough though, although, dough through thorough, borough plough, bough
Words with 'silent' letters (i.e. letters whose presence cannot be predicted from the pronunciation of the word)	Some letters which are no longer sounded used to be sounded hundreds of years ago: e.g. in *knight*, there was a /k/ sound before the /n/, and the **gh** used to represent the sound that 'ch' now represents in the Scottish word *loch*.	doubt, island, lamb, solemn, thistle, knight

Statutory requirements	Rules and guidance	Example words
Homophones and other words that are often confused	In the pairs of words opposite, nouns end **–ce** and verbs end **–se**. *Advice* and *advise* provide a useful clue as the word *advise* (verb) is pronounced with a /z/ sound – which could not be spelt **c**. More examples: aisle: a gangway between seats (in a church, train, plane). isle: an island. aloud: out loud. allowed: permitted. affect: usually a verb (e.g. *The weather may affect our plans*). effect: usually a noun (e.g. *It may have an effect on our plans*). If a verb, it means 'bring about' (e.g. *He will effect changes in the running of the business*). altar: a table-like piece of furniture in a church. alter: to change. ascent: the act of ascending (going up). assent: to agree/agreement (verb and noun). bridal: to do with a bride at a wedding. bridle: reins etc. for controlling a horse. cereal: made from grain (e.g. breakfast cereal). serial: adjective from the noun *series* – a succession of things one after the other. compliment: to make nice remarks about someone (verb) or the remark that is made (noun). complement: related to the word *complete* – to make something complete or more complete (e.g. *her scarf complemented her outfit*).	advice/advise device/devise licence/license practice/practise prophecy/prophesy farther: further father: a male parent guessed: past tense of the verb *guess* guest: visitor heard: past tense of the verb *hear* herd: a group of animals led: past tense of the verb *lead* lead: present tense of that verb, or else the metal which is very heavy (*as heavy as lead*) morning: before noon mourning: grieving for someone who has died past: noun or adjective referring to a previous time (e.g. *In the past*) or preposition or adverb showing place (e.g. *he walked past me*) passed: past tense of the verb 'pass' (e.g. *I passed him in the road*) precede: go in front of or before proceed: go on

	Rules and guidance	Example words
	descent: the act of descending (going down). dissent: to disagree/disagreement (verb and noun). desert: as a noun – a barren place (stress on first syllable); as a verb – to abandon (stress on second syllable) dessert: (stress on second syllable) a sweet course after the main course of a meal. draft: noun – a first attempt at writing something; verb – to make the first attempt; also, to draw in someone (e.g. *to draft in extra help*) draught: a current of air.	principal: adjective – most important (e.g. *principal ballerina*) noun – important person (e.g. *principal of a college*) principle: basic truth or belief profit: money that is made in selling things prophet: someone who foretells the future stationary: not moving stationery: paper, envelopes etc. steal: take something that does not belong to you steel: metal wary: cautious weary: tired who's: contraction of *who is* or *who has* whose: belonging to someone (e.g. *Whose jacket is that?*)

Word list – years 5 and 6

accommodate	criticise (critic + ise)	individual	relevant
accompany	curiosity	interfere	restaurant
according	definite	interrupt	rhyme
achieve	desperate	language	rhythm
aggressive	determined	leisure	sacrifice
amateur	develop	lightning	secretary
ancient	dictionary	marvellous	shoulder
apparent	disastrous	mischievous	signature
appreciate	embarrass	muscle	sincere(ly)
attached	environment	necessary	soldier
available	equip (–ped, –ment)	neighbour	stomach
average	especially	nuisance	sufficient
awkward	exaggerate	occupy	suggest
bargain	excellent	occur	symbol
bruise	existence	opportunity	system
category	explanation	parliament	temperature
cemetery	familiar	persuade	thorough
committee	foreign	physical	twelfth
communicate	forty	prejudice	variety
community	frequently	privilege	vegetable
competition	government	profession	vehicle
conscience*	guarantee	programme	yacht
conscious*	harass	pronunciation	
controversy	hindrance	queue	
convenience	identity	recognise	
correspond	immediate(ly)	recommend	

Notes and guidance

Teachers should continue to emphasis to students the relationships between sounds and letters, even when the relationships are unusual. Once root words are learnt in this way, longer words can be spelt correctly if the rules and guidance for adding prefixes and suffixes are also known. Many of the words in the list above can be used for practice in adding suffixes.

Notes and guidance

Understanding the history of words and relationships between them can also help with spelling.

Examples:

- *Conscience* and *conscious* are related to *science: conscience* is simply *science* with the prefix *con-* added. These words come from the Latin word *scio* meaning *I know*.

- The word *desperate*, meaning 'without hope', is often pronounced in English as *desp'rate*, but the *–sper-* part comes from the Latin *spero,* meaning 'I hope', in which the **e** was clearly sounded.

- *Familiar* is related to *family*, so the /ə/ sound in the first syllable of *familiar* is spelt as **a**.

International Phonetic Alphabet

The table below shows each symbol of the International Phonetic Alphabet (IPA) and provides examples of the associated grapheme(s).[1] The table is not a comprehensive alphabetic code chart; it is intended simply as guidance for teachers in understanding the IPA symbols used in the spelling appendix (English Appendix 1). The pronunciations in the table are, by convention, based on Received Pronunciation and could be significantly different in other accents.

Consonants	
/b/	**b**ad
/d/	**d**og
/ð/	**th**is
/dʒ/	**g**em, **j**ug
/f/	i**f**, pu**ff**, **ph**oto
/g/	**g**um
/h/	**h**ow
/j/	**y**es
/k/	**c**at, che**ck**, **k**ey, s**ch**ool
/l/	**l**eg, hi**ll**
/m/	**m**an
/n/	ma**n**
/ŋ/	si**ng**
/θ/	bo**th**
/p/	**p**et
/r/	**r**ed
/s/	**s**it, mi**ss**, **c**ell
/ʃ/	**sh**e, **ch**ef
/t/	**t**ea
/tʃ/	**ch**eck
/v/	**v**et
/w/	**w**et, **wh**en
/z/	**z**ip, hen**s**, bu**zz**
/ʒ/	plea**s**ure

Vowels	
/ɑː/	f**a**ther, **ar**m
/ɒ/	h**o**t
/æ/	c**a**t
/aɪ/	m**i**nd, f**i**n**e**, p**ie**, h**igh**
/aʊ/	**ou**t, c**ow**
/ɛ/	h**e**n, h**ea**d
/eɪ/	s**ay**, c**a**m**e**, b**ai**t
/ɛə/	**air**
/əʊ/	c**o**ld, b**oa**t, c**o**n**e**, bl**ow**
/ɪ/	h**i**t
/ɪə/	b**eer**
/iː/	sh**e**, b**ea**d, s**ee**, sch**e**m**e**, ch**ie**f
/ɔː/	l**au**nch, r**aw**, b**or**n
/ɔɪ/	c**oi**n, b**oy**
/ʊ/	b**oo**k
/ʊə/	t**our**
/uː/	r**oo**m, y**ou**, bl**ue**, br**u**t**e**
/ʌ/	c**u**p
/ɜː/	f**er**n, t**ur**n, g**ir**l
/ə/	farm**er**

English Appendix 2: Vocabulary, grammar and punctuation

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

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

The grammatical terms that students should learn are set out in the final column. They should learn to recognise and use the terminology through discussion and practice. All terms in **bold** should be understood with the meanings set out in the Glossary.

Vocabulary, grammar and punctuation – Years 1 to 6

Year 1: Detail of content to be introduced (statutory requirement)	
Word	Regular **plural noun suffixes** –*s* or –*es* [for example, *dog, dogs; wish, wishes*], including the effects of these suffixes on the meaning of the noun
	Suffixes that can be added to **verbs** where no change is needed in the spelling of root words (e.g. *helping, helped, helper*)
	How the **prefix** *un*– changes the meaning of **verbs** and **adjectives** [negation, for example, *unkind*, or *undoing*: *untie the boat*]
Sentence	How **words** can combine to make **sentences**
	Joining **words** and joining **clauses** using *and*
Text	Sequencing **sentences** to form short narratives
Punctuation	Separation of **words** with spaces
	Introduction to capital letters, full stops, question marks and exclamation marks to demarcate **sentences**
	Capital letters for names and for the personal **pronoun** *I*
Terminology for pupils	letter, capital letter
	word, singular, plural
	sentence
	punctuation, full stop, question mark, exclamation mark

Year 2: Detail of content to be introduced (statutory requirement)	
Word	Formation of **nouns** using **suffixes** such as –*ness*, –*er* and by compounding [for example, *whiteboard, superman*]
	Formation of **adjectives** using **suffixes** such as –*ful*, –*less*
	(A fuller list of **suffixes** can be found on page 65 in the year 2 spelling section in English Appendix 1)
	Use of the **suffixes** –*er*, –*est* in **adjectives** and the use of –ly in Standard English to turn adjectives into **adverbs**
Sentence	**Subordination** (using *when*, *if*, *that*, *because)* and **co-ordination** (using *or*, *and*, *but*)
	Expanded **noun phrases** for description and specification [for example, *the blue butterfly*, *plain flour*, *the man in the moon*]
	How the grammatical patterns in a sentence indicate its function as a statement, question, exclamation or command

Year 2: Detail of content to be introduced (statutory requirement)	
Text	Correct choice and consistent use of **present tense** and **past tense** throughout writing
	Use of the **progressive** form of **verbs** in the **present** and **past tense** to mark actions in progress [for example, *she is drumming*, *he was shouting*]
Punctuation	Use of capital letters, full stops, question marks and exclamation marks to demarcate **sentences**
	Commas to separate items in a list
	Apostrophes to mark where letters are missing in spelling and to mark singular possession in nouns [for example, *the girl's name*]
Terminology for pupils	noun, noun phrase
	statement, question, exclamation, command
	compound, suffix
	adjective, adverb, verb
	tense (past, present)
	apostrophe, comma

Year 3: Detail of content to be introduced (statutory requirement)	
Word	Formation of **nouns** using a range of **prefixes** [for example *super–*, *anti–*, *auto–*]
	Use of the **forms** *a* or *an* according to whether the next **word** begins with a **consonant** or a **vowel** [for example, *a rock*, *an open box*]
	Word families based on common **words**, showing how words are related in form and meaning [for example, *solve, solution, solver, dissolve, insoluble*]
Sentence	Expressing time, place and cause using **conjunctions** [for example, *when*, *before*, *after*, *while*, *so*, *because*], **adverbs** [for example, *then*, *next*, *soon*, *therefore*], or **prepositions** [for example, *before*, *after*, *during*, *in*, *because of*]
Text	Introduction to paragraphs as a way to group related material
	Headings and sub-headings to aid presentation
	Use of the **present perfect** form of **verbs** instead of the simple past [for example, *He has gone out to play* contrasted with *He went out to play*]
Punctuation	Introduction to inverted commas to **punctuate** direct speech

Year 3: Detail of content to be introduced (statutory requirement)	
Terminology for pupils	preposition, conjunction
	word family, prefix
	clause, subordinate clause
	direct speech
	consonant, consonant letter vowel, vowel letter
	inverted commas (or 'speech marks')

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

Year 5: Detail of content to be introduced (statutory requirement)	
Word	Converting **nouns** or **adjectives** into **verbs** using **suffixes** [for example, *–ate; –ise; –ify*] **Verb prefixes** [for example, *dis–, de–, mis–, over– and re–*]
Sentence	**Relative clauses** beginning with *who*, *which*, *where*, *when*, *whose*, *that*, or an omitted relative pronoun Indicating degrees of possibility using **adverbs** [for example, *perhaps*, *surely*] or **modal verbs** [for example, *might*, *should*, *will*, *must*]
Text	Devices to build **cohesion** within a paragraph [for example, *then*, *after that*, *this*, *firstly*] Linking ideas across paragraphs using **adverbials** of time [for example, *later*], place [for example, *nearby*] and number [for example, *secondly*] or tense choices [for example, he *had* seen her before]
Punctuation	Brackets, dashes or commas to indicate parenthesis Use of commas to clarify meaning or avoid ambiguity
Terminology for pupils	modal verb, relative pronoun relative clause parenthesis, bracket, dash cohesion, ambiguity

Year 6: Detail of content to be introduced (statutory requirement)	
Word	The difference between vocabulary typical of informal speech and vocabulary appropriate for formal speech and writing [for example, *find out – discover; ask for – request; go in – enter*] How words are related by meaning as synonyms and antonyms [for example, *big, large, little*].
Sentence	Use of the **passive** to affect the presentation of information in a **sentence** [for example, *I broke the window in the greenhouse* versus *The window in the greenhouse was broken (by me)*]. The difference between structures typical of informal speech and structures appropriate for formal speech and writing [for example, the use of question tags: *He's your friend*, *isn't he?*, or the use of **subjunctive** forms such as *If <u>I were</u>* or *<u>Were they</u> to come* in some very formal writing and speech]

Year 6: Detail of content to be introduced (statutory requirement)	
Text	Linking ideas across paragraphs using a wider range of **cohesive devices**: repetition of a **word** or phrase, grammatical connections [for example, the use of **adverbials** such as *on the other hand*, *in contrast*, or *as a consequence*], and **ellipsis** Layout devices [for example, headings, sub-headings, columns, bullets, or tables, to structure text]
Punctuation	Use of the semi-colon, colon and dash to mark the boundary between independent **clauses** [for example, *It's raining; I'm fed up*] Use of the colon to introduce a list and use of semi-colons within lists **Punctuation** of bullet points to list information How hyphens can be used to avoid ambiguity [for example, *man eating shark* versus *man-eating shark*, or *recover* versus *re-cover*]
Terminology for pupils	subject, object active, passive synonym, antonym ellipsis, hyphen, colon, semi-colon, bullet points

Glossary for the programmes of study for English

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

Terms in definitions

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

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

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

Term	Guidance	Example
	▪ marking possessives (e.g.	
article	The articles *the* (definite) and *a* or *an* (indefinite) are the most common type of determiner.	*The dog found a bone in an old box.*
auxiliary verb	The auxiliary verbs are: *be, have, do* and the modal verbs. They can be used to make questions and negative statements. In addition: ▪ *be* is used in the progressive and passive ▪ *have* is used in the perfect ▪ *do* is used to form questions and negative statements if no other auxiliary verb is present	*They are winning the match.* [*be* used in the progressive] *Have you finished your picture?* [*have* used to make a question, and the perfect] *No, I don't know him.* [*do* used to make a negative; no other auxiliary is present] *Will you come with me or not?* [modal verb *will* used to make a question about the other person's willingness]
clause	A clause is a special type of phrase whose head is a verb. Clauses can sometimes be complete sentences. Clauses may be main or subordinate. Traditionally, a clause had to have a finite verb, but most modern grammarians also recognise non-finite clauses.	*It was raining.* [single-clause sentence] *It was raining but we were indoors.* [two finite clauses] *If you are coming to the party, please let us know.* [finite subordinate clause inside a finite main clause] *Usha went upstairs to play on her computer.* [non-finite clause]
cohesion	A text has cohesion if it is clear how the meanings of its parts fit together. Cohesive devices can help to do this. In the example, there are repeated references to the same thing (shown by the different style pairings), and the logical relations, such as time and cause, between different parts are clear.	**A visit** has been arranged for *Year 6*, to the Mountain Peaks Field Study Centre, leaving school at 9.30am. **This** is **an overnight visit**. The centre has beautiful grounds and *a nature trail*. During the afternoon, *the children* will follow *the trail*.
cohesive device	Cohesive devices are words used to show how the different parts of a text fit together. In other words, they create cohesion.	*Julia's dad bought her a football. The football was expensive!* [determiner; refers us back to a particular football]

Term	Guidance	Example
	Some examples of cohesive devices are: ▪ determiners and pronouns, which can refer back to earlier words ▪ conjunctions and adverbs, which can make relations ~~betwee~~n words clear ▪ ellipsis of expected words.	*Joe was given a bike for Christmas. He liked it very much.* [the pronouns refer back to Joe and the bike] *We'll be going shopping before we go to the park.* [conjunction; makes a relationship of time clear] *I'm afraid we're going to have to wait for the next train. Meanwhile, we could have a cup of tea.* [adverb; refers back to the time of waiting] *Where are you going? [ ] To school!* [ellipsis of the expected words *I'm going*; links the answer back to the question]
complement	A verb's subject complement adds more information about its subject, and its object complement does the same for its object. Unlike the verb's object, its complement may be an adjective. The verb *be* normally has a complement.	*She is our teacher.* [adds more information about the subject, *she*] *They seem very competent.* [adds more information about the subject, *they*] *Learning makes me happy.* [adds more information about the object, *me*]
compound, compounding	A compound word contains at least two root words in its morphology; e.g. *whiteboard, superman*. Compounding is very important in English.	*blackbird, blow-dry, bookshop, ice-cream, English teacher, inkjet, one-eyed, bone-dry, baby-sit, daydream, outgrow*
conjunction	A conjunction links two words or phrases together. There are two main types of conjunctions: ▪ co-ordinating conjunctions (e.g. *and*) link two words or phrases together as an equal pair ▪ subordinating conjunctions (~~e.g.~~ *when*) introduce a subordinate clause.	*James bought a bat and ball.* [links the words *bat* and *ball* as an equal pair] *Kylie is young but she can kick the ball hard.* [links two clauses as an equal pair] *Everyone watches when Kyle does back-flips.* [introduces a subordinate clause] *Joe can't practise kicking because he's injured.* [introduces a subordinate clause]

Term	Guidance	Example
consonant	A sound which is produced when the speaker closes off or obstructs the flow of air through the vocal tract, usually using lips, tongue or teeth. Most of the letters of the alphabet represent consonants. Only the letters *a, e, i, o, u* and *y* can represent vowel sounds.	/p/ [flow of air stopped by the lips, then released] /t/ [flow of air stopped by the tongue touching the roof of the mouth, then released] /f/ [flow of air obstructed by the bottom lip touching the top teeth] /s/ [flow of air obstructed by the tip of the tongue touching the gum line]
continuous	See progressive	
co-ordinate, co-ordination	Words or phrases are co-ordinated if they are linked as an equal pair by a co-ordinating conjunction (i.e. *and, but, or*). In the examples on the right, the co-ordinated elements are shown in bold, and the conjunction is underlined. The difference between co-ordination and subordination is that, in subordination, the two linked elements are not equal.	***Susan*** <u>and</u> ***Amra*** *met in a café.* [links the words *Susan* and *Amra* as an equal pair] ***They talked*** <u>and</u> ***drank tea*** *for an hour.* [links two clauses as an equal pair] ***Susan got a bus*** <u>but</u> ***Amra walked****.* [links two clauses as an equal pair] Not co-ordination: *They ate* <u>before</u> *they met.* [*before* introduces a subordinate clause]
determiner	A determiner specifies a noun as known or unknown, and it goes before any modifiers (e.g. adjectives or other nouns). Some examples of determiners are: ▪ articles (*the, a* or *an*) ▪ demonstratives (e.g. *this, those*) ▪ possessives (e.g. *my, your*) ▪ quantifiers (e.g. *some, every*).	<u>*the*</u> *home team* [article, specifies the team as known] <u>*a*</u> *good team* [article, specifies the team as unknown] <u>*that*</u> *student* [demonstrative, known] <u>*Julia's*</u> *parents* [possessive, known] <u>*some*</u> *big boys* [quantifier, unknown] Contrast: *home* <u>*the*</u> *team, big* <u>*some*</u> *boys* [both incorrect, because the determiner should come before other modifiers]
digraph	A type of grapheme where two letters represent one phoneme. Sometimes, these two letters are not next to one another; this is called a	The digraph *ea* in *each* is pronounced /iː/. The digraph *sh* in *shed* is pronounced /ʃ/.

Term	Guidance	Example
	split digraph.	The split digraph *i–e* in *line* is pronounced /aɪ/.
ellipsis	Ellipsis is the omission of a word or phrase which is expected and predictable.	*Frankie waved to Ivana and <u>she</u> watched her drive away.* *She did it because she wanted to <u>do it</u>.*
etymology	A word's etymology is its history: its origins in earlier forms of English or other languages, and how its form and meaning have changed. Many words in English have come from Greek, Latin or French.	The word *school* was borrowed from a Greek word *ό÷ïëÞ* (*skholé*) meaning 'leisure'. The word *verb* comes from Latin *verbum*, meaning 'word'. The word *mutton* comes from French *mouton*, meaning 'sheep'.
finite verb	Every sentence typically has at least one verb which is either past or present tense. Such verbs are called 'finite'. The imperative verb in a command is also finite. Verbs that are not finite, such as participles or infinitives, cannot stand on their own: they are linked to another verb in the sentence.	*Lizzie <u>does</u> the dishes every day.* [present tense] *Even Hana did the dishes yesterday.* [past tense] *<u>Do</u> the dishes, Naser!* [imperative] Not finite verbs: ▪ *I have <u>done</u> them.* [combined with the finite verb *have*] ▪ *I will <u>do</u> them.* [combined with the finite verb *will*] ▪ *I want to <u>do</u> them!* [combined with the finite verb *want*]
fronting, fronted	A word or phrase that normally comes after the <u>verb</u> may be moved before the verb: when this happens, we say it has been 'fronted'. For example, a fronted adverbial is an <u>adverbial</u> which has been moved before the verb. When writing fronted phrases, we often follow them with a comma.	*<u>Before we begin</u>, make sure you've got a pencil.* [Without fronting: *Make sure you've got a pencil before we begin.*] *<u>The day after tomorrow</u>, I'm visiting my granddad.* [Without fronting: *I'm visiting my granddad the day after tomorrow.*]

future	Reference to future time can be marked in a number of different ways in English. All these ways involve the use of a present-tense verb. See also tense. Unlike many other languages (such	*He will leave tomorrow.* [present-tense *will* followed by infinitive *leave*] *He may leave tomorrow.* [present-tense *may* followed by infinitive *leave*]

Term	Guidance	Example
	as French, Spanish or Italian), English has no distinct 'future tense' form of the verb comparable with its present and past tenses.	*He leaves tomorrow.* [present-tense *leaves*] *He is going to leave tomorrow.* [present tense *is* followed by *going to* plus the infinitive *leave*]
GPC	See grapheme-phoneme correspondences.	
grapheme	A letter, or combination of letters, that corresponds to a single phoneme within a word.	The grapheme *t* in the words *ten*, *bet* and *ate* corresponds to the phoneme /t/. The grapheme *ph* in the word *dolphin* corresponds to the phoneme /f/.
grapheme-phoneme correspondences	The links between letters, or combinations of letters (graphemes) and the speech sounds (phonemes) that they represent. In the English writing system, graphemes may correspond to different phonemes in different words.	The grapheme *s* corresponds to the phoneme /s/ in the word *see*, but… …it corresponds to the phoneme /z/ in the word *easy*.
head	See phrase.	
homonym	Two different words are homonyms if they both look exactly the same when written, and sound exactly the same when pronounced.	*Has he left yet? Yes – he went through the door on the left.* *The noise a dog makes is called a bark. Trees have bark.*
homophone	Two different words are homophones if they sound exactly the same when pronounced.	*hear*, *here* *some*, *sum*
infinitive	A verb's infinitive is the basic form used as the head-word in a dictionary (e.g. *walk, be*). Infinitives are often used: ▪ after *to* ▪ after modal verbs.	*I want to walk.* *I will be quiet.*
inflection	When we add *-ed* to *walk*, or change *mouse* to *mice*, this change of morphology produces an inflection ('bending') of the basic word which has special grammar (e.g. past tense	*dogs* is an inflection of *dog.* *went* is an inflection of *go.* *better* is an inflection of *good.*

Term	Guidance	Example
	or plural). In contrast, adding *-er* to *walk* produces a completely different word, *walker*, which is part of the same word family. Inflection is sometimes thought of as merely a change of ending, but, in fact, some words change completely when inflected.	
intransitive verb	A verb which does not need an object in a sentence to complete its meaning is described as intransitive. See 'transitive verb'.	*We all laughed.* *We would like to stay longer, but we must leave.*
main clause	A sentence contains at least one clause which is not a subordinate clause; such a clause is a main clause. A main clause may contain any number of subordinate clauses.	*It was raining but the sun was shining.* [two main clauses] *The man **who wrote it** told me **that it was true**.* [one main clause containing two subordinate clauses.] *She said, "It rained all day."* [one main clause containing another.]
modal verb	Modal verbs are used to change the meaning of other verbs. They can express meanings such as certainty, ability, or obligation. The main modal verbs are *will, would, can, could, may, might, shall, should, must* and *ought*. A modal verb only has finite forms and has no suffixes (e.g. *I sing – he sings*, but not *I must – he musts*).	*I can do this maths work by myself.* *This ride may be too scary for you!* *You should help your little brother.* *Is it going to rain? Yes, it might.* *Canning swim is important.* [not possible because *can* must be finite; contrast: *Being able to swim is important*, where *being* is not a modal verb]
modify, modifier	One word or phrase modifies another by making its meaning more specific. Because the two words make a phrase, the 'modifier' is normally close to the modified word.	In the phrase *primary-school teacher*: ▪ *teacher* is modified by *primary- school* (to mean a specific kind of teacher) ▪ *school* is modified by *primary* (to mean a specific kind of school).
morphology	A word's morphology is its internal make-up in terms of root words and suffixes or prefixes, as well as other kinds of change such as the change	*dogs* has the morphological make-up: *dog + s*. *unhelpfulness* has the

Term	Guidance	Example
	of *mouse* to *mice*. Morphology may be used to produce different inflections of the same word (e.g. *boy – boys*), or entirely new words (e.g. *boy – boyish*) belonging to the same word family. A word that contains two or more root words is a compound (e.g. *news+paper, ice+cream*).	morphological make-up: *unhelpful + ness* ▪ where *unhelpful = un + helpful* ▪ and *helpful = help + ful*
noun	The surest way to identify nouns is by the ways they can be used after determiners such as *the*: for example, most nouns will fit into the frame "The____matters/matter." Nouns are sometimes called 'naming words' because they name people, places and 'things'; this is often true, but it doesn't help to distinguish nouns from other word classes. For example, prepositions can name places and verbs can name 'things' such as actions. Nouns may be classified as **common** (e.g. *boy, day*) or **proper** (e.g. *Ivan*, *Wednesday*), and also as **countable** (e.g. *thing, boy*) or **non-countable** (e.g. *stuff, money*). These classes can be recognised by the determiners they combine with.	*Our <u>dog</u> bit the <u>burglar</u> on his <u>behind</u>!* *My big <u>brother</u> did an amazing <u>jump</u> on his <u>skateboard</u>.* *<u>Actions</u> speak louder than <u>words</u>.* Not nouns: ▪ *He's <u>behind</u> you!* [this names a place, but is a preposition, not a noun] ▪ *She <u>can</u> jump so high!* [this names an action, but is a verb, not a noun] common, countable: *a <u>book</u>, books, two <u>chocolates</u>, one <u>day</u>, fewer <u>ideas</u>* common, non-countable: *<u>money</u>, some <u>chocolate</u>, less <u>imagination</u>* proper, countable: *<u>Marilyn</u>, <u>L</u>ondon, <u>Wednesday</u>*
noun phrase	A noun phrase is a phrase with a noun as its head, e.g. *some foxes, foxes with bushy tails*. Some grammarians recognise one-word phrases, so that *foxes are multiplying* would contain the noun *foxes* acting as the head of the noun phrase *foxes*.	*<u>Adult foxes</u> can jump.* [*adult* modifies *foxes*, so *adult* belongs to the noun phrase] *<u>Almost all healthy adult foxes in this area</u> can jump.* [all the other words help to modify *foxes*, so they all belong to the noun phrase]
object	An object is normally a noun, pronoun or noun phrase that comes straight after the verb, and shows what the verb is acting upon. Objects can be turned into the	*Year 2 designed <u>puppets</u>.* [noun acting as object] *I like <u>that</u>.* [pronoun acting as object]

Term	Guidance	Example
	subject of a passive verb, and cannot be adjectives (contrast with complements).	Some people suggested a pretty display. [noun phrase acting as object] Contrast: ▪ *A display was suggested.* [object of active verb becomes the subject of the passive verb] ▪ *Year 2 designed pretty.* [incorrect, because adjectives cannot be objects]
participle	Verbs in English have two participles, called 'present participle' (e.g. *walking, taking*) and 'past participle' (e.g. *walked, taken*). Unfortunately, these terms can be confusing to learners, because: ▪ they don't necessarily have anything to do with present or past time ▪ although past participles are used as perfects (e.g. *has eaten*) they are also used as passives (e.g. *was eaten*).	*He is walking to school.* [present participle in a progressive] *He has taken the bus to school.* [past participle in a perfect] *The photo was taken in the rain.* [past participle in a passive]

passive	The sentence *It was eaten by our dog* is the passive of *Our dog ate it*. A passive is recognisable from: • the past participle form *eaten* • the normal object (*it*) turned into the subject • the normal subject (*our dog*) turned into an optional preposition phrase with *by* as its head • the verb *be*(*was*), or some other verb such as *get*. Contrast active. A verb is not 'passive' just because it has a passive meaning: it must be the passive version of an active verb.	*A visit was <u>arranged</u> by the school.* *Our cat got run over by a bus.* Active versions: • *The school arranged a visit.* • *A bus ran over our cat.* Not passive: • *He received a warning.* [past tense, active *received*] • *We had an accident.* [past tense, active *had*]
past tense	Verbs in the past tense are commonly used to:	*Tom and Chris <u>showed</u> me their new TV.* [names an event in the

Term	Guidance	Example
	▪ talk about the past ▪ talk about imagined situations ▪ make a request sound more polite. Most verbs take a suffix *–ed*, to form their past tense, but many commonly-used verbs are irregular. See also tense.	past] *Antonio* <u>*went*</u> *on holiday to Brazil.* [names an event in the past; irregular past of *go*] *I wish I* <u>*had*</u> *a puppy.* [names an imagined situation, not a situation in the past] *I* <u>*was*</u> *hoping you'd help tomorrow.* [makes an implied request sound more polite]
perfect	The perfect form of a verb generally calls attention to the consequences of a prior event; for example, *he has gone to lunch* implies that he is still away, in contrast with *he went to lunch*. 'Had gone to lunch' takes a past time point (i.e. when we arrived) as its reference point and is another way of establishing time relations in a text. The perfect tense is formed by: ▪ turning the verb into its past participle inflection ▪ adding a form of the verb *have* before it. It can also be combined with the progressive (e.g. *he has been going*)	*She* <u>*has downloaded*</u> *some songs.* [present perfect; now she has some songs] *I* <u>*had eaten*</u> *lunch when you came.* [past perfect; I wasn't hungry when you came]

Term	Guidance	Example
phoneme	A phoneme is the smallest unit of sound that signals a distinct, contrasting meaning. For example: ▪ /t/ contrasts with /k/ to signal the difference between *tap* and *cap* ▪ /t/ contrasts with /l/ to signal the difference between *bought* and *ball*. It is this contrast in meaning that tells us there are two distinct phonemes at work. There are around 44 phonemes in English; the exact number depends on regional accents. A single phoneme may be represented in writing by one, two, ~~three or~~ four letters constituting a single <u>grapheme</u>.	The word *cat* has three letters and three phonemes: /kæt/ The word *catch* has five letters and three phonemes: /katʃ/ The word *caught* has six letters and three phonemes: /kɔ:t/
phrase	A phrase is a group of words that are grammatically connected so that they stay together, and that expand a single word, called the 'head'. The phrase is a <u>noun phrase</u> if its head is a noun, a <u>preposition phrase</u> if its head is a preposition, and so on; but if the head is a <u>verb</u>, the phrase is called a clause. Phrases can be made up of other phrases.	*She waved to <u>her mother</u>.* [a noun phrase, with the noun *mother* as its head] *She waved <u>to her mother</u>.* [a preposition phrase, with the preposition *to* as its head] *She <u>waved to her mother</u>.* [a clause, with the verb *waved* as its head]
plural	A plural <u>noun</u> normally has a <u>suffix</u> –*s* or –*es* and means 'more than one'. There are a few nouns with different <u>morphology</u> in the plural (e.g. *mice, formulae*).	*dogs* [more than one dog]*; boxes* [more than one box] *mice* [more than one mouse]
possessive	A possessive can be: ▪ a <u>noun</u> followed by an <u>apostrophe</u>, with or without *s* ▪ a possessive <u>pronoun</u>. The relation expressed by a possessive goes well beyond ordinary ideas of 'possession'. A possessive may act as a <u>determiner</u>.	*<u>Tariq's</u> book* [Tariq has the book] *The <u>boys'</u> arrival* [the boys arrive] *<u>His</u> obituary* [the obituary is about him] *That essay is <u>mine</u>.* [I wrote the essay]

prefix	A prefix is added at the beginning of a word in order to turn it into another word. Contrast suffix.	*overtake, disappear*
preposition	A preposition links a following noun, pronoun or noun phrase to some other word in the sentence. Prepositions often describe locations or directions, but can describe other things, such as relations of time. Words like *before* or *since* can act either as prepositions or as conjunctions.	*Tom waved goodbye to Christy. She'll be back from Australia in two weeks.* *I haven't seen my dog since this morning.* Contrast: *I'm going, since no-one wants me here!* [conjunction: links two clauses]

Term	Guidance	Example
preposition phrase	A preposition phrase has a preposition as its head followed by a noun, pronoun or noun phrase.	*He was <u>in bed</u>.* *I met them <u>after the party</u>.*

present tense	<u>Verbs</u> in the present tense are commonly used to:
	
	  ▪ talk about the present
	  ▪ talk about the <u>future</u>.
	
	They may take a suffix *–s* (depending on the <u>subject</u>).
	
	See also <u>tense</u>.
		Jamal <u>goes</u> to the pool every day. [describes a habit that exists now]
		
		He <u>can</u> swim. [describes a state that is true now]
		
		The bus <u>arrives</u> at three. [scheduled now]
		
		My friends <u>are</u> coming to play. [describes a plan in progress now]

progressive	The progressive (also known as the 'continuous') form of a <u>verb</u> generally describes events in progress. It is formed by combining the verb's present <u>participle</u> (e.g. *singing*) with a form of the verb *be* (e.g. *he was singing*). The progressive can also be combined with the <u>perfect</u> (e.g. *he has been singing*).	*Michael <u>is singing</u> in the store room.* [present progressive] *Amanda <u>was making</u> a patchwork quilt.* [past progressive] *Usha <u>had been practising</u> for an hour when I called.* [past perfect progressive]

pronoun	Pronouns are normally used like <u>nouns</u>, except that:
	
	  ▪ they are grammatically more specialised
	  ▪ it is harder to <u>modify</u> them
	
	In the examples, each sentence is written twice: once with nouns, and once with pronouns (underlined). Where the same thing is being talked about, the words are shown in bold.
		Amanda *waved to* **Michael**.
		
		<u>**She**</u> *waved to* <u>**him**</u>.
		
		John's *mother is over there.* <u>**His**</u> *mother is over there.*
		
		The **visit** *will be an overnight* **visit**. <u>**This**</u> *will be an overnight* **visit**.
		
		Simon *is the person:* **Simon** *broke it.* <u>**He**</u> *is the one* <u>**who**</u> *broke it.*

punctuation	Punctuation includes any conventional features of writing other than spelling and general layout: the standard punctuation marks . , ; : ? ! - – ( ) " " ' ' , and also word-spaces, capital letters, apostrophes, paragraph breaks and bullet points. One important role of punctuation is to indicate <u>sentence</u> boundaries.	*"<u>I</u>'m going o<u>u</u>t, Usha<u>,</u> and <u>I</u> won't be long<u>,</u>" Mum said.*
Received Pronunciation	Received Pronunciation (often abbreviated to RP) is an accent which is used only by a small	

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

Term	Guidance	Example
	root word (or words) of the word we are interested in.	
schwa	The name of a vowel sound that is found only in unstressed positions in English. It is the most common vowel sound in English. It is written as /ə/ in the International Phonetic Alphabet. In the English writing system, it can be written in many different ways.	/əlɒŋ/ [*along*] /bʌtə/ [*butter*] /dɒktə/ [*doctor*]
sentence	A sentence is a group of <u>words</u> which are grammatically connected to each other but not to any words outside the sentence. The form of a sentence's main clause shows whether it is being used as a statement, a question, a command or an exclamation. A sentence may consist of a single clause or it may contain several clauses held together by subordination or co-ordination. Classifying sentences as 'simple', 'complex' or 'compound' can be confusing, because a 'simple' sentence may be complicated, and a 'complex' one may be straightforward. The terms **'single-clause sentence'** and **'multi-clause sentence'** may be more helpful.	*John went to his friend's house. He stayed there till tea-time.* *John went to his friend's house, he stayed there till tea-time.* [This is a 'comma splice', a common error in which a comma is used where either a full stop or a semi-colon is needed to indicate the lack of any grammatical connection between the two clauses.] *You are my friend.* [statement] *Are you my friend?* [question] *Be my friend!* [command] *What a good friend you are!* [exclamation] *Ali went home on his bike to his goldfish and his current library book about pets.* [single-clause sentence] *She went shopping but took back everything she had bought because she didn't like any of it.* [multi-clause sentence]
split digraph	See <u>digraph</u>.	
Standard English	Standard English can be recognised by the use of a very small range of forms such as *those books , I did it* and *I wasn't doing anything* (rather than their non-Standard equivalents); it is not limited to any particular accent. It is the variety of English which is used, with only minor	*I did it because they were not willing to undertake any more work on those houses.* [formal Standard English] *I did it cos they wouldn't do any more work on those houses.* [casual Standard English]

Term	Guidance	Example
	variation, as a major world language. Some people use Standard English all the time, in all situations from the most casual to the most formal, so it covers most registers. The aim of the national curriculum is that everyone should be able to use Standard English as needed in writing and in relatively formal speaking.	*I done it cos they wouldn't do no more work on them houses.* [casual non-Standard English]
stress	A syllable is stressed if it is pronounced more forcefully than the syllables next to it. The other syllables are unstressed.	*about* *visit*

subject	The subject of a verb is normally the noun, noun phrase or pronoun that names the 'do-er' or 'be-er'. The subject's normal position is:
	
	  ▪ just before the verb in a statement
	
	  ▪ just after the auxiliary verb, in a question.
	
	Unlike the verb's object and complement, the subject can determine the form of the verb (e.g. *I am, you are*).
		Rula's mother went out.
		
		That is uncertain.
		
		The children will study the animals.
		
		Will the children study the animals?

subjunctive	In some languages, the inflections of a verb include a large range of special forms which are used typically in subordinate clauses, and are called 'subjunctives'. English has very few such forms and those it has tend to be used in rather formal styles.	*The school requires that all students be honest.* *The school rules demand that students not enter the gym at lunchtime.* *If Zoë were the class president, things would be much better.*

subordinate, subordination	A subordinate word or phrase tells us more about the meaning of the word it is subordinate to. Subordination can be thought of as an unequal relationship between a subordinate word and a main word. For example:
	
	  ▪ an adjective is subordinate to the noun it modifies
	
	  ▪ subjects and objects are
		big dogs [*big* is subordinate to *dogs*]
		
		Big dogs need long walks. [*big dogs* and *long walks* are subordinate to *need*]
		
		We can watch TV when we've finished. [*when we've finished* is subordinate to *watch*]

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

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Term	Guidance	Example
	a future tense. (See also: future.) The simple tenses (present and past) may be combined in English with the perfect and progressive.	tense + infinitive – future time] *He plans to study tomorrow.* [present tense + infinitive – future time] *If he studied tomorrow, he'd see the difference!* [past tense – imagined future] Contrast three distinct tense forms in Spanish: ▪ *Estudia.* [present tense] ▪ *Estudió.* [past tense] ▪ *Estudiará.* [future tense]
transitive verb	A transitive verb takes at least one object in a sentence to complete its meaning, in contrast to an intransitive verb, which does not.	*He loves Juliet.* *She understands English grammar.*
trigraph	A type of grapheme where three letters represent one phoneme.	*High, pure, patch, hedge*
unstressed	See stressed.	
verb	The surest way to identify verbs is by the ways they can be used: they can usually have a tense, either present or past (see also future). Verbs are sometimes called 'doing words' because many verbs name an action that someone does; while this can be a way of recognising verbs, it doesn't distinguish verbs from nouns (which can also name actions). Moreover many verbs name states or feelings rather than actions. Verbs can be classified in various ways: for example, as auxiliary, or modal; as transitive or intransitive; and as states or events.	*He lives in Birmingham.* [present tense] *The teacher wrote a song for the class.* [past tense] *He likes chocolate.* [present tense; not an action] *He knew my father.* [past tense; not an action] Not verbs: ▪ *The walk to Halina's house will take an hour.* [noun] ▪ *All that surfing makes Morwenna so sleepy!*
vowel	A vowel is a speech sound which is produced without any closure or obstruction of the vocal tract. Vowels can form syllables by themselves, or they may combine with consonants. In the English writing system, the letters *a*, *e*, *i*, *o*, *u* and *y* can represent vowels.	

Term	Guidance	Example
word	A word is a unit of grammar: it can be selected and moved around relatively independently, but cannot easily be split. In punctuation, words are normally separated by word spaces. Sometimes, a sequence that appears grammatically to be two words is collapsed into a single written word, indicated with a hyphen or apostrophe (e.g. *well-built, he's*).	_headteacher_ or _head teacher_ [can be written with or without a space] *I'm* going out. _9.30 am_
word class	Every word belongs to a word class which summarises the ways in which it can be used in grammar. The major word classes for English are: noun, verb, adjective, adverb, preposition, determiner, pronoun, conjunction. Word classes are sometimes called 'parts of speech'.	
word family	The words in a word family are normally related to each other by a combination of morphology, grammar and meaning.	*teach – teacher* *extend – extent – extensive* *grammar – grammatical – grammarian*

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Mathematics Programmes of study: Key Stages 1 and 2

National curriculum in England adapted for the Cayman Islands

August 2019

Purpose of study

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

Aims

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

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that students develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

- to become active participants in their own learning by helping to establish learning success criteria, understanding and utilizing metacognitive strategies, critical thinking, as well as using and responding to feedback from teachers and peers

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

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

Information and communication technology (ICT)

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

Spoken language

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

School curriculum

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

Attainment targets

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

Key stage 1 – years 1 and 2

The principal focus of mathematics teaching in key stage 1 is to ensure that students develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, students should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures (those in common use in the Cayman Islands and in England) to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of year 2, students should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency.

Students should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Year 1 programme of study

Number – number and place value

Statutory requirements

Students should be taught to:

▪ 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.

Notes and guidance

Students practise counting (1, 2, 3…), ordering (for example, first, second, third…), and to indicate a quantity (for example, 3 apples, 2 centimetres), including solving simple concrete problems, until they are fluent.

Students begin to recognise place value in numbers beyond 20 by reading, writing, counting and comparing numbers up to 100, supported by objects and pictorial representations.

They practise counting as reciting numbers and counting as enumerating objects, and counting in twos, fives and tens from different multiples to develop their recognition of patterns in the number system (for example, odd and even numbers), including varied and frequent practice through increasingly complex questions.

They recognise and create repeating patterns with objects and with shapes.

Number – addition and subtraction

Statutory requirements

Students should be taught to:

▪ 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 such as $7 = \square - 9$.

Notes and guidance

Students memorise and reason with number bonds to 10 and 20 in several forms (for example, $9 + 7 = 16$; $16 - 7 = 9$; $7 = 16 - 9$). They should realise the effect of adding or subtracting zero. This establishes addition and subtraction as related operations.

Students combine and increase numbers, counting forwards and backwards.

They discuss and solve problems in familiar practical contexts, including using quantities. Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than, so that students develop the concept of addition and subtraction and are enabled to use these operations flexibly.

Number – multiplication and division

Statutory requirements

Students should be taught to:

▪ 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.

Notes and guidance

Through grouping and sharing small quantities, students begin to understand: multiplication and division; doubling numbers and quantities; and finding simple fractions of objects, numbers and quantities.

They make connections between arrays, number patterns, and counting in twos, fives and tens.

Number – fractions

Statutory requirements

Students should be taught to:

▪ 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.

Notes and guidance

Students are taught half and quarter as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. For example, they could recognise and find half a length, quantity, set of objects or shape. Students connect halves and quarters to the equal sharing and grouping of sets of objects and to measures, as well as recognising and combining halves and quarters as parts of a whole.

Measurement

Statutory requirements

Students should be taught to:

▪ 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:

Statutory requirements

- 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.

Notes and guidance

The pairs of terms: mass and weight, volume and capacity, are used interchangeably at this stage.

Students move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example, counting) and continuous (for example, liquid) measurement, to using manageable common standard units.

In order to become familiar with standard measures, students begin to use measuring tools such as a ruler, weighing scales and containers.

Students use the language of time, including telling the time throughout the day, first using o'clock and then half past.

Geometry – properties of shapes

Statutory requirements

Students should be taught to:

- 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].

Notes and guidance

Students handle common 2-D and 3-D shapes, naming these and related everyday objects fluently. They recognise these shapes in different orientations and sizes, and know that rectangles, triangles, cuboids and pyramids are not always similar to each other.

Geometry – position and direction

Statutory requirements
Students should be taught to: ▪ describe position, direction and movement, including whole, half, quarter and three-quarter turns.

Notes and guidance

Students use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside.

Students make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face.

Year 2 programme of study

Number – number and place value

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Using materials and a range of representations, students practise counting, reading, writing and comparing numbers to at least 100 and solving a variety of related problems to develop fluency. They count in multiples of three to support their later understanding of a third.

As they become more confident with numbers up to 100, students are introduced to larger numbers to develop further their recognition of patterns within the number system and represent them in different ways, including spatial representations.

Students should partition numbers in different ways (for example, 23 = 20 + 3 and 23 = 10 + 13) to support subtraction. They become fluent and apply their knowledge of numbers to reason with, discuss and solve problems that emphasise the value of each digit in two-digit numbers. They begin to understand zero as a place holder.

Number – addition and subtraction

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students extend their understanding of the language of addition and subtraction to include sum and difference.

Students practise addition and subtraction to 20 to become increasingly fluent in deriving facts such as using $3 + 7 = 10$; $10 − 7 = 3$ and $7 = 10 − 3$ to calculate $30 + 70 = 100$; $100 − 70 = 30$ and $70 = 100 − 30$. They check their calculations, including by adding to check subtraction and adding numbers in a different order to check addition (for example, $5 + 2 + 1 = 1 + 5 + 2 = 1 + 2 + 5$). This establishes commutativity and associativity of addition.

Recording addition and subtraction in columns supports place value and prepares for formal written methods with larger numbers.

Number – multiplication and division

Statutory requirements

Students should be taught to:

- 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 ($\times$), division ($\div$) 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.

Notes and guidance

Students use a variety of language to describe multiplication and division.

Students are introduced to the multiplication tables. They practise to become fluent in the 2, 5 and 10 multiplication tables and connect them to each other. They connect the 10 multiplication table to place value, and the 5 multiplication table to the divisions on the clock face. They begin to use other multiplication tables and recall multiplication facts, including using related division facts to perform written and mental calculations.

Students work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. They begin to relate these to fractions and measures (for example, $40 \div 2 = 20$, 20 is a half of 40). They use commutativity and inverse relations to develop multiplicative reasoning (for example, $4 \times 5 = 20$ and $20 \div 5 = 4$).

Number – fractions

Statutory requirements

Students should be taught to:

- recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity

- write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

Notes and guidance

Students use fractions as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of

Notes and guidance

lengths, quantities, sets of objects or shapes. They meet $\frac{3}{4}$ as the first example of a non-unit fraction.

Students should count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line (for example, $1\frac{1}{4}$, $1\frac{2}{4}$ (or $1\frac{1}{2}$), $1\frac{3}{4}$, 2). This reinforces the concept of fractions as numbers and that they can add up to more than one.

Measurement

Statutory requirements

Students should be taught to:

- 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 U.S. dollars ($) and cents (c); CI dollars (CI$) and cents (c); 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.

Notes and guidance

Students use standard units of measurement with increasing accuracy, using their knowledge of the number system. They use the appropriate language and record using standard abbreviations.

Comparing measures includes simple multiples such as 'half as high'; 'twice as wide'.

They become fluent in telling the time on analogue clocks and recording it.

Students become fluent in counting and recognising coins. They read and say amounts of money confidently and use the symbols $ and c, CI$ and c, £ and p accurately, recording dollars/pounds and cents/pence separately.

Geometry – properties of shapes

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students handle and name a wide variety of common 2-D and 3-D shapes including: quadrilaterals and polygons, and cuboids, prisms and cones, and identify the properties of each shape (for example, number of sides, number of faces). Students identify, compare and sort shapes on the basis of their properties and use vocabulary precisely, such as sides, edges, vertices and faces.

Students read and write names for shapes that are appropriate for their word reading and spelling.

Students draw lines and shapes using a straight edge.

Geometry – position and direction

Statutory requirements

Students should be taught to:

- order and arrange combinations of mathematical objects in patterns and sequences

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

Notes and guidance

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

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

Notes and guidance
angles).

Statistics

Statutory requirements

Students should be taught to:

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables

- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

- ask and answer questions about totalling and comparing categorical data.

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

Lower key stage 2 – years 3 and 4

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

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

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

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

Whilst the focus is still on using, measuring and calculating with metric units, a knowledge of the imperial units in common use in Cayman, such as inch, feet, yard, mile, pound, ounce, pint and degrees Fahrenheit is also required

Year 3 programme of study

Number – number and place value

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students now use multiples of 2, 3, 4, 5, 8, 10, 50 and 100.

They use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems, building on work in year 2 (for example, 146 = 100 + 40 and 6, 146 = 130 + 16).

Using a variety of representations, including those related to measure, students continue to count in ones, tens and hundreds, so that they become fluent in the order and place value of numbers to 1000.

Number – addition and subtraction

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students practise solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100.

Students use their understanding of place value and partitioning, and practise using columnar addition and subtraction with increasingly large numbers up to three digits to become fluent (see Mathematics Appendix 1).

Number – multiplication and division

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2, 4 and 8 multiplication tables.

Students develop efficient mental methods, for example, using commutativity and associativity (for example, 4 × 12 × 5 = 4 × 5 × 12 = 20 × 12 = 240) and multiplication and division facts (for example, using 3 × 2 = 6, 6 ÷ 3 = 2 and 2 = 6 ÷ 3) to derive related facts (for example, 30 × 2 = 60, 60 ÷ 3 = 20 and 20 = 60 ÷ 3).

Students develop reliable written methods for multiplication and division, starting with calculations of two-digit numbers by one-digit numbers and progressing to the formal written methods of short multiplication and division.

Students solve simple problems in contexts, deciding which of the four operations to use and why. These include measuring and scaling contexts, (for example, four times as high, eight times as long etc.) and correspondence problems in which m objects are connected to n objects (for example, 3 hats and 4 coats, how many different outfits?; 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children).

Number – fractions

Statutory requirements

Students should be taught to:

- 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, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]

- compare and order unit fractions, and fractions with the same denominators

- solve problems that involve all of the above.

Notes and guidance

Students connect tenths to place value, decimal measures and to division by 10.

They begin to understand unit and non-unit fractions as numbers on the number line, and deduce relations between them, such as size and equivalence. They should go beyond the [0, 1] interval, including relating this to measure.

Students understand the relation between unit fractions as operators (fractions of), and division by integers.

They continue to recognise fractions in the context of parts of a whole, numbers, measurements, a shape, and unit fractions as a division of a quantity.

Students practise adding and subtracting fractions with the same denominator through a variety of increasingly complex problems to improve fluency.

Measurement

Statutory requirements

Students should be taught to:

- 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 U.S. dollars ($) and c; CI dollars (CI$) and c, £ 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].

Notes and guidance

Students continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1 kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm).

The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high) and this connects to multiplication.

Students continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record U.S. dollars ($) and c; CI dollars (CI$) and c, £ and p separately. The decimal recording of money is introduced formally in year 4.

Students use both analogue and digital 12-hour clocks and record their times. In this way they become fluent in and prepared for using digital 24-hour clocks in year 4.

Geometry – properties of shapes

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students' knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygons and polyhedra. Students extend their use of the properties of shapes. They should be able to describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.

Students connect decimals and rounding to drawing and measuring straight lines in centimetres, in a variety of contexts.

Statistics

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students understand and use simple scales (for example, 2, 5, 10 units per cm) in pictograms and bar charts with increasing accuracy.

They continue to interpret data presented in many contexts.

Year 4 programme of study

Number – number and place value

Statutory requirements

Students should be taught to

- count in multiples of 6, 7, 9, 25 and 1000

- find 1000 more or less than a given number

- count backwards through zero to include negative numbers

- recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

- order and compare numbers beyond 1000

- identify, represent and estimate numbers using different representations

- round any number to the nearest 10, 100 or 1000

- solve number and practical problems that involve all of the above and with increasingly large positive numbers

- read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.

Notes and guidance

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

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

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

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

Number – addition and subtraction

Statutory requirements

Students should be taught to:

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate

- estimate and use inverse operations to check answers to a calculation

- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

Notes and guidance

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

Number – multiplication and division

Statutory requirements

Students should be taught to:

- recall multiplication and division facts for multiplication tables up to 12 × 12

- use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

- recognise and use factor pairs and commutativity in mental calculations

- multiply two-digit and three-digit numbers by a one-digit number using formal written layout

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

Notes and guidance

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

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

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

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

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

Number – fractions (including decimals)

Statutory requirements

Students should be taught to:

- recognise and show, using diagrams, families of common equivalent fractions

- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

- solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number

- add and subtract fractions with the same denominator

- recognise and write decimal equivalents of any number of tenths or hundredths

- recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$

- find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths

- round decimals with one decimal place to the nearest whole number

- compare numbers with the same number of decimal places up to two decimal places

- solve simple measure and money problems involving fractions and decimals to two decimal places.

Notes and guidance

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

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

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

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

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

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

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

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

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

Measurement

Statutory requirements

Students should be taught to:
- Convert between different units of measure [for example, kilometre to metre; hour to minute]

- measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres

- find the area of rectilinear shapes by counting squares

- estimate, compare and calculate different measures, including money in pounds and pence

- read, write and convert time between analogue and digital 12- and 24-hour clocks

- solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Notes and guidance

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

They use multiplication to convert from larger to smaller units.

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

They relate area to arrays and multiplication.

Geometry – properties of shapes

Statutory requirements

Students should be taught to:

▪ compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

▪ identify acute and obtuse angles and compare and order angles up to two right angles by size

▪ identify lines of symmetry in 2-D shapes presented in different orientations

▪ complete a simple symmetric figure with respect to a specific line of symmetry.

Notes and guidance

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

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

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

Geometry – position and direction

Statutory requirements

Students should be taught to:

▪ 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

Statutory requirements

up/down

- plot specified points and draw sides to complete a given polygon.

Notes and guidance

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

Statistics

Statutory requirements

Students should be taught to:

- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.

- solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Notes and guidance

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

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

Upper key stage 2 – years 5 and 6

The principal focus of mathematics teaching in upper key stage 2 is to ensure that students extend their understanding of the number system and place value to include larger integers. This should develop the connections that students make between multiplication and division with fractions, decimals, percentages and ratio.

At this stage, students should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, students are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that students classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them.

By the end of year 6, students should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

Students should read, spell and pronounce mathematical vocabulary correctly.

Whilst the focus is still on using, measuring and calculating with metric units, a knowledge of the imperial units in common use in Cayman, such as inch, feet, yard, mile, pound, oz, pint and degrees Fahrenheit is also required

Year 5 programme of study

Number – number and place value

Statutory requirements

Students should be taught to:

- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit

- count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000

- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000

- solve number problems and practical problems that involve all of the above

- read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Notes and guidance
Students identify the place value in large whole numbers.

They continue to use number in context, including measurement. Students extend and apply their understanding of the number system to the decimal numbers and fractions that they have met so far.

They should recognise and describe linear number sequences, including those involving fractions and decimals, and find the term-to-term rule.

They should recognise and describe linear number sequences (for example, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$ ...), including those involving fractions and decimals, and find the term-to-term rule in words (for example, add $\frac{1}{2}$).

Number – addition and subtraction

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students practise using the formal written methods of columnar addition and subtraction with increasingly large numbers to aid fluency (see Mathematics Appendix 1).

They practise mental calculations with increasingly large numbers to aid fluency (for example, 12 462 – 2300 = 10 162).

Number – multiplication and division

Statutory requirements

Students should be taught to:

- 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

Statutory requirements

- 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.

Notes and guidance

Students practise and extend their use of the formal written methods of short multiplication and short division (see Mathematics Appendix 1). They apply all the multiplication tables and related division facts frequently, commit them to memory and use them confidently to make larger calculations.

They use and understand the terms factor, multiple and prime, square and cube numbers.

Students interpret non-integer answers to division by expressing results in different ways according to the context, including with remainders, as fractions, as decimals or by rounding (for example, $98 \div 4 = \frac{98}{4} = 24$ r $2 = 24\frac{1}{2} = 24.5 \approx 25$).

Students use multiplication and division as inverses to support the introduction of ratio in year 6, for example, by multiplying and dividing by powers of 10 in scale drawings or by multiplying and dividing by powers of a 1000 in converting between units such as kilometres and metres.

Distributivity can be expressed as $a(b + c) = ab + ac$.

They understand the terms factor, multiple and prime, square and cube numbers and use them to construct equivalence statements (for example, 4 x 35 = 2 x 2 x 35; 3 x 270 = 3 x 3 x 9 x 10 = 9^2 x 10).

Students use and explain the equals sign to indicate equivalence, including in missing number problems (for example, 13 + 24 = 12 + 25; 33 = 5 x ☐).

Number – fractions (including decimals and percentages)

Statutory requirements

Students should be taught to:

- compare and order fractions whose denominators are all multiples of the same number

- identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths

- recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]

- 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, $0.71 = \frac{71}{100}$]

- 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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.

Notes and guidance

Students should be taught throughout that percentages, decimals and fractions are different ways of expressing proportions.

They extend their knowledge of fractions to thousandths and connect to decimals and measures.

Students connect equivalent fractions > 1 that simplify to integers with division and other fractions > 1 to division with remainders, using the number line and other models, and hence move from these to improper and mixed fractions.

Students connect multiplication by a fraction to using fractions as operators (fractions of), and to division, building on work from previous years. This relates to scaling by simple fractions, including fractions > 1.

Students practise adding and subtracting fractions to become fluent through a variety of increasingly complex problems. They extend their understanding of adding and subtracting fractions to calculations that exceed 1 as a mixed number.

Students continue to practise counting forwards and backwards in simple fractions.

Students continue to develop their understanding of fractions as numbers, measures and operators by finding fractions of numbers and quantities.

Students extend counting from year 4, using decimals and fractions including bridging zero, for example on a number line.

Students say, read and write decimal fractions and related tenths, hundredths and thousandths accurately and are confident in checking the reasonableness of their answers to problems.

They mentally add and subtract tenths, and one-digit whole numbers and tenths.

They practise adding and subtracting decimals, including a mix of whole numbers and decimals, decimals with different numbers of decimal places, and complements of 1 (for example, 0.83 + 0.17 = 1).

Students should go beyond the measurement and money models of decimals, for example, by solving puzzles involving decimals.

Students should make connections between percentages, fractions and decimals (for example, 100% represents a whole quantity and 1% is $\frac{1}{100}$, 50% is $\frac{50}{100}$, 25% is $\frac{25}{100}$) and relate this to finding 'fractions of'.

Measurement

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students use their knowledge of place value and multiplication and division to convert between standard units.

Students calculate the perimeter of rectangles and related composite shapes, including using the relations of perimeter or area to find unknown lengths. Missing measures questions such as these can be expressed algebraically, for example $4 + 2b = 20$ for a rectangle of sides 2 cm and *b* cm and perimeter of 20cm.

Students calculate the area from scale drawings using given measurements.

Students use all four operations in problems involving time and money, including conversions (for example, days to weeks, expressing the answer as weeks and days).

Geometry – properties of shapes

Statutory requirements

Students should be taught to:

- identify 3-D shapes, including cubes and other cuboids, from 2-D representations

- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

- draw given angles, and measure them in degrees (^{o})

- identify:

    - angles at a point and one whole turn (total 360°)

    - angles at a point on a straight line and $\frac{1}{2}$ a 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.

Notes and guidance

Students become accurate in drawing lines with a ruler to the nearest millimetre, and measuring with a protractor. They use conventional markings for parallel lines and right angles.

Students use the term diagonal and make conjectures about the angles formed between sides, and between diagonals and parallel sides, and other properties of quadrilaterals, for example using dynamic geometry ICT tools.

Students use angle sum facts and other properties to make deductions about missing angles and relate these to missing number problems.

Geometry – position and direction

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students recognise and use reflection and translation in a variety of diagrams, including continuing to use a 2-D grid and coordinates in the first quadrant. Reflection should be in lines

Notes and guidance
that are parallel to the axes.

Statistics

Statutory requirements

Students should be taught to:

- solve comparison, sum and difference problems using information presented in a line graph

- complete, read and interpret information in tables, including timetables.

Notes and guidance
Students connect their work on coordinates and scales to their interpretation of time graphs.

They begin to decide which representations of data are most appropriate and why.

Year 6 programme of study

Number – number and place value

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance
Students use the whole number system, including saying, reading and writing numbers accurately.

Number – addition, subtraction, multiplication and division

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students practise addition, subtraction, multiplication and division for larger numbers, using the formal written methods of columnar addition and subtraction, short and long multiplication, and short and long division (see Mathematics Appendix 1).

They undertake mental calculations with increasingly large numbers and more complex calculations.

Students continue to use all the multiplication tables to calculate mathematical statements in order to maintain their fluency.

Students round answers to a specified degree of accuracy, for example, to the nearest 10, 20, 50 etc., but not to a specified number of significant figures.

Students explore the order of operations using brackets; for example, 2 + 1 x 3 = 5 and (2 + 1) x 3 = 9.

Common factors can be related to finding equivalent fractions.

Number – fractions (including decimals and percentages)

Statutory requirements

Students should be taught to:

- 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 [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]

- divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]

- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]

- 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.

Notes and guidance

Students should practise, use and understand the addition and subtraction of fractions with different denominators by identifying equivalent fractions with the same denominator. They should start with fractions where the denominator of one fraction is a multiple of the other (for example, $\frac{1}{2} + \frac{1}{8} = \frac{5}{8}$) and progress to varied and increasingly complex problems.

Students should use a variety of images to support their understanding of multiplication with fractions. This follows earlier work about fractions as operators (fractions of), as numbers, and as equal parts of objects, for example as parts of a rectangle.

Students use their understanding of the relationship between unit fractions and division to work backwards by multiplying a quantity that represents a unit fraction to find the whole quantity

Notes and guidance

(for example, if $\frac{1}{4}$ of a length is 36cm, then the whole length is 36 × 4 = 144cm).

They practise calculations with simple fractions and decimal fraction equivalents to aid fluency, including listing equivalent fractions to identify fractions with common denominators.

Students can explore and make conjectures about converting a simple fraction to a decimal fraction (for example, 3 ÷ 8 = 0.375). For simple fractions with recurring decimal equivalents, students learn about rounding the decimal to three decimal places, or other appropriate approximations depending on the context. Students multiply and divide numbers with up to two decimal places by one-digit and two-digit whole numbers. Students multiply decimals by whole numbers, starting with the simplest cases, such as 0.4 × 2 = 0.8, and in practical contexts, such as measures and money.

Students are introduced to the division of decimal numbers by one-digit whole number, initially, in practical contexts involving measures and money. They recognise division calculations as the inverse of multiplication.

Students also develop their skills of rounding and estimating as a means of predicting and checking the order of magnitude of their answers to decimal calculations. This includes rounding answers to a specified degree of accuracy and checking the reasonableness of their answers.

Ratio and proportion

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students recognise proportionality in contexts when the relations between quantities are in the same ratio (for example, similar shapes and recipes).

Students link percentages or 360° to calculating angles of pie charts.

Students should consolidate their understanding of ratio when comparing quantities, sizes and scale drawings by solving a variety of problems. They might use the notation *a:b* to record their work.

Students solve problems involving unequal quantities, for example, 'for every egg you need three spoonfuls of flour', '$\frac{3}{5}$ of the class are boys'. These problems are the foundation for later formal approaches to ratio and proportion.

Algebra

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students should be introduced to the use of symbols and letters to represent variables and unknowns in mathematical situations that they already understand, such as:

- missing numbers, lengths, coordinates and angles

- formulae in mathematics and science

- equivalent expressions (for example, $a + b = b + a$)

- generalisations of number patterns

- number puzzles (for example, what two numbers can add up to).

Measurement

Statutory requirements

Students should be taught to:

- 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].

Notes and guidance

Students connect conversion (for example, from kilometres to miles) to a graphical representation as preparation for understanding linear/proportional graphs.

They know approximate conversions and are able to tell if an answer is sensible.

Using the number line, students use, add and subtract positive and negative integers for measures such as temperature.

They relate the area of rectangles to parallelograms and triangles, for example, by dissection, and calculate their areas, understanding and using the formulae (in words or symbols) to do this.

Students could be introduced to compound units for speed, such as miles per hour, and apply their knowledge in science or other subjects as appropriate.

Geometry – properties of shapes

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students draw shapes and nets accurately, using measuring tools and conventional markings and labels for lines and angles.

Students describe the properties of shapes and explain how unknown angles and lengths can be derived from known measurements.

These relationships might be expressed algebraically for example, $d = 2 \times r$, $a = 180 - (b + c)$.

Geometry – position and direction

Statutory requirements

Students should be taught to:

- 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.

Notes and guidance

Students draw and label a pair of axes in all four quadrants with equal scaling. This extends their knowledge of one quadrant to all four quadrants, including the use of negative numbers.

Students draw and label rectangles (including squares), parallelograms and rhombuses, specified by coordinates in the four quadrants, predicting missing coordinates using the properties of shapes. These might be expressed algebraically for example, translating vertex (a, b) to $(a – 2, b + 3)$; (a, b) and $(a + d, b + d)$ being opposite vertices of a square of side d.

Statistics

Statutory requirements

Students should be taught to:

- interpret and construct pie charts and line graphs and use these to solve problems

- calculate and interpret the mean as an average.

Notes and guidance

Students connect their work on angles, fractions and percentages to the interpretation of pie charts.

Students both encounter and draw graphs relating two variables, arising from their own enquiry and in other subjects.

They should connect conversion from kilometres to miles in measurement to its graphical representation.

Students know when it is appropriate to find the mean of a data set.

Mathematics Appendix 1: Examples of formal written methods for addition, subtraction, multiplication and division

This appendix sets out some examples of formal written methods for all four operations to illustrate the range of methods that could be taught. It is not intended to be an exhaustive list, nor is it intended to show progression in formal written methods. For example, the exact position of intermediate calculations (superscript and subscript digits) will vary depending on the method and format used.

For multiplication, some students may include an addition symbol when adding partial products. For division, some students may include a subtraction symbol when subtracting multiples of the divisor.

Addition and subtraction

789 + 642 becomes	874 – 523 becomes	932 – 457 becomes	932 – 457 becomes

```
      7  8  9                8  7  4              8  12  1                 1   1
   +  6  4  2             −  5  2  3              9   3  2              9   3   2
   _____          _____          − 4   5  7            − 4   5   7
      1  4  3  1             3  5  1             _____              5   6
         1  1                                     4   7  5            _____
                                                                        4   7   5
```

Answer: 1431	Answer: 351	Answer: 475	Answer: 475

Short multiplication

24 × 6 becomes	342 × 7 becomes	2741 × 6 becomes

```
         2  4                  3  4  2              2  7  4  1
      ×     6               ×        7           ×           6
      _____             _____          _____
      1  4  4               2  3  9  4           1  6  4  4  6
         2                     2  1                 4  2
```

Answer: 144	Answer: 2394	Answer: 16 446

Long multiplication

24 × 16 becomes	124 × 26 becomes	124 × 26 becomes

24 × 16 becomes

```
        2
    2   4
  ×  1  6
  ─────────
  2  4   0
  1  4   4
  ─────────
  3  8   4
```

Answer: 384

124 × 26 becomes

```
      1   2
    1  2  4
  ×     2  6
  ───────────
  2  4  8  0
     7  4  4
  ───────────
  3  2  2  4
     1  1
```

Answer: 3224

124 × 26 becomes

```
      1   2
    1  2  4
  ×     2  6
  ───────────
     7  4  4
  2  4  8  0
  ───────────
  3  2  2  4
     1  1
```

Answer: 3224

Short division

98 ÷ 7 becomes

```
      1   4
    ┌────────
  7 │ 9  ²8
```

Answer: 14

432 ÷ 5 becomes

```
        8   6  r 2
    ┌─────────────
  5 │ 4  ³3  2
```

Answer: 86 remainder 2

496 ÷ 11 becomes

```
          4   5  r 1
      ┌─────────────
  1 1 │ 4  ⁵9  6
```

Answer: $45\frac{1}{11}$

Long division

432 ÷ 15 becomes

```
          2  8  r 12
  1  5 │ 4  3  2
        3  0  0
        ───────
        1  3  2
        1  2  0
        ───────
           1  2
```

Answer: 28 remainder 12

432 ÷ 15 becomes

```
          2  8
  1  5 │ 4  3  2
        3  0  0    15×20
        ───────
        1  3  2
        1  2  0    15×8
        ───────
           1  2
```

$$\frac{\cancel{12}}{\cancel{15}} = \frac{4}{5}$$

Answer: $28\frac{4}{5}$

432 ÷ 15 becomes

```
          2  8 · 8
  1  5 │ 4  3  2 · 0
        3  0 ↓
        ───────
        1  3  2
        1  2  0 ↓
        ───────
           1  2  0
           1  2  0
           ───────
                 0
```

Answer: 28·8

Science programmes of study: key stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

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

Aims

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

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics

- develop understanding of the **nature, processes and methods (skills) of science** through different types of science enquiries that help them to answer scientific questions about the world around them

- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.

- to become active participants in their own learning by helping to establish learning success criteria, understanding and utilising metacognitive strategies, critical thinking, as well as using and responding to feedback from teachers and peers

Scientific knowledge and conceptual understanding

The programmes of study describe a sequence of knowledge and concepts. While it is important that students make progress, it is also vitally important that they develop secure understanding of each key block of skills, knowledge and concepts in order to progress to the next stage. Insecure, superficial understanding will not allow genuine progression: students may struggle at key points of transition (such as between primary and secondary school), build up serious misconceptions, and/or have significant difficulties in understanding higher-order content. Therefore students should build upon and use: preconceptions, slef-regulation, modelling, memory, practical investigations, scientific vocabulary and feedback.

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

The nature, processes and methods of science

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

Spoken language

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

School programme of study

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

Attainment targets

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

Schools are encouraged to add to the statutory curriculum objectives in order to develop their own schools' programme of study.

Key stage 1

The principal focus of science teaching in key stage 1 is to enable students to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as texts, photographs and videos.

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

Students should read and spell scientific vocabulary (with an awareness of both American and British terms, e.g faucet and tap) at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Key stage 1 programme of study – years 1 and 2

Working scientifically

Statutory requirements

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

- asking scientific enquiry questions and recognising that they can be answered in different ways

- observing closely, using simple equipment

- performing simple tests and investigations

- identifying and classifying measurements and observations

- using their observations and ideas to suggest answers to questions

- gathering, recording and communicating data to help in answering questions and making comparisons.

Notes and guidance

Students in years 1 and 2 should explore the world around them and raise their own questions. They should experience different types of scientific enquiries, including practical activities, and begin to recognise ways in which they might answer scientific questions. They should use simple features to compare objects, materials and living things and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they should begin to notice patterns and relationships. They can use information to make simple predictions. They should ask people questions and use simple secondary sources to find answers. They should use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out simple tests, record simple data, and talk about what they have found out and how they found it out. With help, they should record and communicate their findings in a range of ways and begin to use simple scientific language.

These opportunities for working scientifically should be embedded throughout lessons across years 1 and 2 so that the expectations in the programme of study can be met by the end of year 2. Students are not expected to cover each aspect for every area of study.

Year 1 programme of study

Plants

Statutory requirements

Students 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.

Notes and guidance

Students should use the local environment throughout the year to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables that they have planted.

They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem).

Students might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Students might keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.

Animals, including humans

Statutory requirements

Students 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

Statutory requirements

- 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.

Notes and guidance

Students should use the local environment throughout the year to explore and answer questions about animals in their habitat. They should understand how to take care of animals taken from their local environment and the need to return them safely after study. Students should become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets.

Students should have plenty of opportunities to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes.

Students might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.

Everyday materials

Statutory requirements

Students 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.

Notes and guidance

Students should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent. Students should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil. As well as considering sustainability and the environment

Students might work scientifically by: performing simple tests to explore questions, for example: 'What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast's leotard?'

Seasonal changes

Statutory requirements

Students should be taught to:

- gather secondary research on changes across the four seasons
- observe and describe weather associated with seasons in the Cayman Islands (including hurricanes) and how day length varies.

Notes and guidance

Students should observe and talk about changes in the weather and the seasons.

Note: Students should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses.

Students might work scientifically by: making tables and graphs about the weather; and making displays of what happens in the world around them, including day length, as the seasons change– using examples from other countries.

Year 2 programme of study

Living things and their habitats

Statutory requirements

Students 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.

Notes and guidance

Students should be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. They should raise and answer questions that help them to become familiar with the life processes that are common to all living things. Students should be introduced to the terms 'habitat' (a natural environment or home of a variety of plants and animals) and 'micro-habitat' (a very small habitat, for example for woodlice under stones, logs or leaf litter). They should raise and answer questions about the local environment that help them to identify and study a variety of plants and animals within their habitat and observe how living things depend on each other, for example, plants serving as a source of food and shelter for animals. Students should compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest.

Students might work scientifically by: sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. They should describe how they decided where to place things, exploring questions for example: 'Is a flame alive? Is a deciduous tree dead in winter?' and talk about ways of answering their questions. They could construct a simple food chain that includes humans (e.g. grass, cow, human). They could describe the conditions in different habitats and micro-habitats (under log, on stony path, under bushes) and find out how the conditions affect the number and type(s) of plants and animals that live there.

Plants

Statutory requirements

Students 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.

Notes and guidance

Students should use the local environment throughout the year to observe how different plants grow. Students should be introduced to the requirements of plants for germination, growth and survival, as well as to the processes of reproduction and growth in plants.
Note: Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them.
Students might work scientifically by: observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy.

Animals, including humans

Statutory requirements

Students 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.

Notes and guidance

Students should be introduced to the basic needs of animals for survival, as well as the importance of exercise and nutrition for humans. They should also be introduced to the processes of reproduction and growth in animals. The focus at this stage should be on questions that help students to recognise growth; they should not be expected to understand how reproduction occurs.

Notes and guidance

The following examples might be used: egg, chick, chicken; egg, caterpillar, pupa, butterfly; spawn, tadpole, frog; lamb, sheep. Growing into adults can include reference to baby, toddler, child, teenager, adult.

Students might work scientifically by: observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions.

Uses of everyday materials

Statutory requirements

Students 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.

Notes and guidance

Students should identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles) or different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass). They should think about the properties of materials that make them suitable or unsuitable for particular purposes and they should be encouraged to think about unusual and creative uses for everyday materials. As well as considering sustainability and the environment Students might find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.

Students might work scientifically by: comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs); observing closely, identifying and classifying the uses of different materials, and recording their observations.

Lower key stage 2 – years 3 and 4

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

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

Students should read and spell scientific vocabulary (with an awareness of both American and British terms, e.g faucet and tap) correctly and with confidence, using their growing word reading and spelling knowledge.

Lower key stage 2 programme of study

Working scientifically

Statutory requirements

During years 3 and 4, students 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, graphs, and tables

- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

- identifying differences, similarities or changes related to simple scientific ideas and processes

- using straightforward scientific evidence to answer questions or to support their findings.

Notes and guidance

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

Notes and guidance

They should learn how to use new equipment, such as data loggers, appropriately. They should collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data. With help, students should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions. With support, they should identify new questions arising from the data, making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done. They should also recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations. Students should use relevant scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences.

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

Year 3 programme of study

Plants

Statutory requirements

Students 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 of flowering plants, including pollination, seed formation and seed dispersal.

Notes and guidance

Students should be introduced to the relationship between structure and function: the idea that every part has a job to do. They should explore questions that focus on the role of the roots and stem in nutrition and support, leaves for nutrition and flowers for reproduction.
Note: Students can be introduced to the idea that plants can make their own food, but at this stage they do not need to understand how this happens.
Students might work scientifically by: comparing the effect of different factors on plant growth, for example, the amount of light, the amount of fertiliser; discovering how seeds are formed by observing the different stages of plant life cycles over a period of time; looking for patterns in the structure of fruits that relate to how the seeds are dispersed. They might observe how water is transported in plants, for example, by putting cut, white carnations into coloured water and observing how water travels up the stem to the flowers.

Animals, including humans

Statutory requirements

Students 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.

Notes and guidance

Students should continue to learn about the importance of nutrition and should be introduced to the main body parts associated with the skeleton and muscles, finding out how different parts of the body have special functions.

Students might work scientifically by: identifying and grouping animals with and without skeletons and observing and comparing their movement; exploring ideas about what would happen if humans did not have skeletons. They might compare and contrast the diets of different animals (including their pets) and decide ways of grouping them according to what they eat. They might research different food groups and how they keep us healthy and design meals based on what they find out.

Rocks

Statutory requirements

Students 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
- recognise that soils are made from rocks and organic matter.

Notes and guidance

Linked with work in geography, students should explore different kinds of rocks and soils, including those in the local environment.

Notes and guidance

Students might work scientifically by: observing rocks, including those used in buildings and gravestones, and exploring how and why they might have changed over time; using a hand lens or microscope to help them to identify and classify rocks according to whether they have grains or crystals, and whether they have fossils in them. Students should research, compare and discuss the different kinds of living things whose fossils are found in sedimentary rock and explore how fossils are formed. – there are lots of local examples of this along Cayman shores (Ironshore)Students could explore different soils and identify similarities and differences between them and investigate what happens when rocks are rubbed together or what changes occur when they are in water. They can raise and answer questions about the way soils are formed.

Light

Statutory requirements

Students 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 an opaque object
- find patterns in the way that the size of shadows change.

Notes and guidance

Students should explore what happens when light reflects off a mirror or other reflective surfaces, including playing mirror games to help them to answer questions about how light behaves. They should think about why it is important to protect their eyes from bright lights. They should look for, and measure, shadows, and find out how they are formed and what might cause the shadows to change.

Note: Students should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses.

Students might work scientifically by: looking for patterns in what happens to shadows when the light source moves or the distance between the light source and the object changes.

Forces and magnets

Statutory requirements

Students 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.

Notes and guidance

Students should observe that magnetic forces can act without direct contact, unlike most forces, where direct contact is necessary (for example, opening a door, pushing a swing). They should explore the behaviour and everyday uses of different magnets (for example, bar, ring, button and horseshoe).

Students might work scientifically by: comparing how different things move and grouping them; raising questions and carrying out tests to find out how far things move on different surfaces and gathering and recording data to find answers their questions; exploring the strengths of different magnets and finding a fair way to compare them; sorting materials into those that are magnetic and those that are not; looking for patterns in the way that magnets behave in relation to each other and what might affect this, for example, the strength of the magnet or which pole faces another; identifying how these properties make magnets useful in everyday items and suggesting creative uses for different magnets.

Year 4 programme of study

Living things and their habitats

Statutory requirements

Students should be taught to:

- recognise that living things can be grouped in a variety of ways

- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

- recognise that environments can change and that this can sometimes pose dangers to living things.

Notes and guidance

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

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

Students should explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population and development, for example: invasive species, litter (especially with respect to the ocean) or deforestation. As well as considering sustainability, the environment and the impacts of global warming. Specific Cayman Islands examples would include the mangroves and coral reefs

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

Animals, including humans

Statutory requirements

Students should be taught to:

- describe the simple functions of the basic parts of the digestive system in humans

- identify the different types of teeth in humans and their simple functions

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

Notes and guidance

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

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

State of matter

Statutory requirements

Students 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) (and Fahrenheit)

- identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Notes and guidance

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

Notes and guidance

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

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

Sound

Statutory requirements

Students should be taught to:

- identify how sounds are made, associating some of them with something vibrating

- recognise that vibrations from sounds travel through a medium to the ear

- find patterns between the pitch of a sound and features of the object that produced it

- find patterns between the volume of a sound and the strength of the vibrations that produced it

- recognise that sounds get fainter as the distance from the sound source increases.

Notes and guidance

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

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

Electricity

Statutory requirements

Students should be taught to:

- identify common appliances that run on electricity

- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

- identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery

- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

- recognise some common conductors and insulators, and associate metals with being good conductors.

Notes and guidance

Students should construct simple series circuits, trying different components, for example, bulbs, buzzers and motors, and including switches, and use their circuits to create simple devices. Students should draw the circuit as a pictorial representation, not necessarily using conventional circuit symbols at this stage; these will be introduced in year 6.
Note: Students might use the terms current and voltage, but these should not be introduced or defined formally at this stage. Students should be taught about precautions for working safely with electricity.
Students might work scientifically by: observing patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be used to connect across a gap in a circuit.

Upper key stage 2 – years 5 and 6

The principal focus of science teaching in upper key stage 2 is to enable students to develop a deeper understanding of a wide range of scientific ideas. They should do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. At upper key stage 2, they should encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. They should also begin to recognise that scientific ideas change and develop over time. They should select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information. Students should draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

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

Students should read, spell and pronounce scientific vocabulary (with an awareness of both American and British terms, e.g faucet and tap) correctly.

Upper key stage 2 programme of study

Working scientifically

Statutory requirements

During years 5 and 6, students 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.

Notes and guidance

Students in years 5 and 6 should use their science experiences to: explore ideas and raise different kinds of questions; select and plan the most appropriate type of scientific enquiry to use to answer scientific questions; recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why.

They should use and develop keys and other information records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment. They should make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them; choose the most appropriate equipment to make measurements and explain how to use it accurately. They should decide how to record data from a choice of familiar approaches; look for different causal relationships in their data and identify evidence that refutes or supports their ideas. They should use their results to identify when further tests and observations might be needed; recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact. They should use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas and should talk about how scientific ideas have developed over time.

Notes and guidance

These opportunities for working scientifically should be embedded throughout lessons   in years 5 and 6 so that the expectations in the programme of study can be met by the end of year 6. Students are not expected to cover each aspect for every area of study.

Year 5 programme of study

Living things and their habitats

Statutory requirements

Students 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.

Notes and guidance

Students should study and raise questions about their local environment throughout the year. They should observe life-cycle changes in a variety of living things, for example, plants in the vegetable garden or flower border, and animals in the local environment. They should find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane Goodall, as well as local examples such as Mr. Frederic J. Burton

Students should find out about different types of reproduction, including sexual and asexual reproduction in plants, and sexual reproduction in animals.

Students might work scientifically by: observing and comparing the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times), asking pertinent questions and suggesting reasons for similarities and differences. They might try to grow new plants from different parts of the parent plant, for example, seeds, stem and root cuttings, tubers, bulbs. They might observe changes in an animal over a period of time (for example, by hatching and rearing chicks), comparing how different animals reproduce and grow.

Animals, including humans

Statutory requirements

Students should be taught to:

- describe the changes as humans develop to old age

Notes and guidance

Students should draw a timeline to indicate stages in the growth and development of humans. They should learn about the changes experienced in puberty

Students could work scientifically by researching the gestation periods of other animals and comparing them with humans; by finding out and recording the length and mass of a baby as it grows.

Properties and changes of materials

Statutory requirements

Students 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.

Notes and guidance

Students should build a more systematic understanding of materials by exploring and comparing the properties of a broad range of materials, including relating these to what they learnt about magnetism in year 3 and about electricity in year 4. They should explore reversible changes, including, evaporating, filtering, sieving, melting and dissolving, recognising that melting and dissolving are different processes. Students should explore changes that are difficult to reverse, for example, burning, rusting and other reactions, for example, vinegar with bicarbonate of soda. They should find out about how chemists create new materials, for example, Spencer Silver, who invented the glue for sticky notes or Ruth Benerito, who invented wrinkle-free cotton.

Notes and guidance

Note: Students are not required to make quantitative measurements about conductivity and insulation at this stage. It is sufficient for them to observe that some conductors will produce a brighter bulb in a circuit than others and that some materials will feel hotter than others when a heat source is placed against them. Safety guidelines should be followed when burning materials.

Students might work scientifically by: carrying out tests to answer questions, for example, 'Which materials would be the most effective for making a warm jacket, for wrapping ice cream to stop it melting, or for making blackout curtains?' They might compare materials in order to make a switch in a circuit. They could observe and compare the changes that take place, for example, when burning different materials or baking bread or cakes. They might research and discuss how chemical changes have an impact on our lives, for example, cooking, and discuss the creative use of new materials such as polymers, super-sticky and super-thin materials.

Earth and space

Statutory requirements

Students 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.

Notes and guidance

Students should be introduced to a model of the Sun and Earth that enables them to explain day and night. Students should learn that the Sun is a star at the centre of our solar system and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune (Pluto was reclassified as a 'dwarf planet' in 2006). They should understand that a moon is a celestial body that orbits a planet (Earth has one moon; Jupiter has four large moons and numerous smaller ones).

Note: Students should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses.

Notes and guidance

Students should find out about the way that ideas about the solar system have developed, understanding how the geocentric model of the solar system gave way to the heliocentric model by considering the work of scientists such as Ptolemy, Alhazen and Copernicus.

Students might work scientifically by: comparing the time of day at different places on the Earth through internet links and direct communication; creating simple models of the solar system; constructing simple shadow clocks and sundials, calibrated to show midday and the start and end of the school day; finding out why some people think that structures such as Stonehenge might have been used as astronomical clocks.

Forces

Statutory requirements

Students 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.

Notes and guidance

Students should explore falling objects and raise questions about the effects of air resistance. They should explore the effects of air resistance by observing how different objects such as parachutes and sycamore seeds fall. They should experience forces that make things begin to move, get faster or slow down. Students should explore the effects of friction on movement and find out how it slows or stops moving objects, for example, by observing the effects of a brake on a bicycle wheel. Students should explore the effects of levers, pulleys and simple machines on movement. Students might find out how scientists, for example, Galileo Galilei and Isaac Newton helped to develop the theory of gravitation.

Students might work scientifically by: exploring falling paper cones or cup-cake cases, and designing and making a variety of parachutes and carrying out fair tests to determine which designs are the most effective. They might explore resistance in water by making and testing boats of different shapes. They might design and make products that use levers, pulleys, gears and/or springs and explore their effects.

Year 6 programme of study

Living things and their habitats

Statutory requirements

Students 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.

Notes and guidance

Students should build on their learning about grouping living things in year 4 by looking at the classification system in more detail. They should be introduced to the idea that broad groupings, such as micro-organisms, plants and animals can be subdivided. Through direct observations where possible, they should classify animals into commonly found invertebrates (such as insects, spiders, snails, worms) and vertebrates (fish, amphibians, reptiles, birds and mammals). They should discuss reasons why living things are placed in one group and not another.

Students might find out about the significance of the work of scientists such as Carl Linnaeus, a pioneer of classification.

Students might work scientifically by: using classification systems and keys to identify some animals and plants in the immediate environment. They could research unfamiliar animals and plants from a broad range of other habitats and decide where they belong in the classification system.

Animals including humans

Statutory requirements

Student 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

Notes and guidance

Students should build on their learning from years 3 and 4 about the main body parts and internal organs (skeletal, muscular and digestive system) to explore and answer questions that help them to understand how the circulatory system enables the body to function.
Students should learn how to keep their bodies healthy and how their bodies might be damaged – including how some drugs and other substances can be harmful to the human body.
Students might work scientifically by: exploring the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health.

Adaptation and inheritance

Statutory requirements

Students 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.

Notes and guidance

Building on what they learned about fossils in the topic on rocks in year 3, students should find out more about how living things on earth have changed over time. They should be introduced to the idea that characteristics are passed from parents to their offspring, for instance by considering different breeds of dogs, and what happens when, for example, labradors are crossed with poodles. They should also appreciate that variation in offspring over time can make animals more or less able to survive in particular environments, for example, by exploring how giraffes' necks got longer, or the development of insulating fur on the arctic fox. Students might find out about the work of palaeontologists such as Mary Anning and about how Charles Darwin and Alfred Wallace developed their ideas on evolution.

Note: At this stage, students are not expected to understand how genes and chromosomes work.

Students might work scientifically by: observing and raising questions about local animals and how they are adapted to their environment; comparing how some living things are adapted to survive in extreme conditions, for example, cactuses, penguins and camels. They might analyse the advantages and disadvantages of specific adaptations, such as being on two feet rather than four, having a long or a short beak, having gills or lungs, tendrils on climbing plants, brightly coloured and scented flowers.

Light

Statutory requirements

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Students 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.

Notes and guidance

Students should build on the work on light in year 3, exploring the way that light behaves, including light sources, reflection and shadows. They should talk about what happens and make predictions.

Students might work scientifically by: deciding where to place rear-view mirrors on cars; designing and making a periscope and using the idea that light appears to travel in straight lines to explain how it works. They might investigate the relationship between light sources, objects and shadows by using shadow puppets. They could extend their experience of light by looking a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water and coloured filters (they do not need to explain why these phenomena occur).

Electricity

Statutory requirements

Students 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

Notes and guidance

Building on their work in year 4, students should construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors. They should learn how to represent a simple circuit in a diagram using recognised symbols.

Note: Students are expected to learn only about series circuits, not parallel circuits. Students should be taught to take the necessary precautions for working safely with electricity.

Students might work scientifically by: systematically identifying the effect of changing one component at a time in a circuit; designing and making a set of traffic lights, a burglar alarm or some other useful circuit. Where circuit kit may not be available or unreliable, online simulators can be used effectively.

Art and Design programmes of study: key stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

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

Aims

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

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

Attainment targets

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

Subject content

Key stage 1

Students 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, (including local and regional) describing the differences and similarities between different practices and disciplines, and making links to their own work.

- about the heritage arts of the Cayman Islands

Key stage 2

Students should be taught to develop their techniques, including their control and their use of materials, (including local materials e.g. silver thatch, caymanite, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

Students 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, and clay]

- about great artists, (architects and designers including local and regional) in history.

- about the heritage arts of the Cayman Islands

Computing programmes of study: key stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

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

Aims

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

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

- to become active participants in their own learning by establishing learning success criteria, understanding and utilising metacognitive strategies, critical thinking, as well as using and responding to feedback from teachers and peers

Attainment targets

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

NB: All related subject content objectives, resources and assessment is further detailed in the *Computing in the national curriculum - A guide for primary teachers* document

Objectives from the subject content do not need to be met using computers or laptops

Subject content

Key stage 1

Students 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 2

Students 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/internet research; and the opportunities they offer for communication and collaboration
- use web based 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 cloud based internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including physical outputs, collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Design and Technology programmes of study: key stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, students design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and skills as well as drawing on disciplines such as mathematics, science, engineering, computing and art. Students learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation, and has played a vital role in Caymanian culture history and local innovations, e.g. silver thatch, cat boats, thatch rope etc..

Aims

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

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

- to become active participants in their own learning by establishing learning success criteria, understanding and utilising metacognitive strategies, critical thinking, as well as using and responding to feedback from teachers and peers

Attainment targets

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

Subject content

Key stage 1

Through a variety of creative and practical activities, students should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment – especially solutions to problems within these contexts].

When designing and making, students 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

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

Evaluate
- explore and evaluate a range of existing products (both local relevant examples and general examples)
- evaluate their ideas and products against design criteria (for example; sustainability)

Technical knowledge
- build structures, exploring how they can be made stronger, more rigid, and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles in their product

Key stage 2

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

When designing and making, students 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 – the engineering design process.

Make
- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate
- investigate and analyse a range of existing products (both local relevant examples and general examples)
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge
- apply their understanding of how to strengthen, improve rigidity, increase the carrying capacity and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Cooking and nutrition

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

Students should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes (including examples of Caymanian, Caribbean and international dishes)
- understand where food comes from (in a locally sourced and imported context, with consideration to sustainability and ethics)

Key stage 2

- understand and apply the principles of a healthy and varied diet, additionally the consequences of poor nutrition
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques(including examples of Caymanian, Caribbean and international dishes)
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Local examples include: mangoes, avocados, breadfruit, conch, lobster, cattle etc.

Languages programmes of study: key stage 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

Learning a foreign language is a liberation from insularity and provides an opening to other cultures. A high-quality languages education should foster students' curiosity and deepen their understanding of the world. Spanish is an important language for the Cayman Islands because of the economic and cultural ties this country has developed with Latin America and the Caribbean, and to a lesser degree, the rest of the Spanish speaking world. Historically has always been Spanish speaking Caymanians and the number of Spanish speakers on the islands remains significant. The large and rapidly growing Spanish speaking population in particular offers the Cayman Islands considerable potential for tourism and trade. There are over 350 million native speakers of Spanish in 22 countries worldwide. This makes Spanish one of the widely spoken languages in the world, hence the language of choice.

The teaching should enable students to express their ideas and thoughts in another language and to understand and respond to its speakers, both in speech and in writing. It should also provide opportunities for them to communicate for practical purposes, learn new ways of thinking and read great literature in the original language. Language teaching should provide the foundation for learning further languages, equipping students to study and work in other countries.

Aims

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

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

Attainment targets

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

Subject content

Key stage 2: Foreign language

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

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

Students 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.

Life Skills Education

Programme of Study:

Key Stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

Life Skills Education (LSE) is a planned, developmental programme of learning through which students acquire the knowledge, understanding and skills they need to manage their lives now and in the future. LSE contributes to personal development by helping students to build their confidence, resilience and self-esteem, and to identify and manage risk, make informed choices and understand what influences their decisions. It enables them to recognise, accept and shape their identities, to understand and accommodate difference and change, to manage emotions and to communicate constructively in a variety of settings. It also equips students to live healthy, safe, productive, capable, responsible and balanced lives as individuals, family members and members of society.

LSE can help schools to reduce or remove many of the barriers to learning experienced by students, significantly improving their capacity to learn and achieve. The LSE programme of study also makes a significant contribution to meeting the statutory responsibility of developing students' spiritual, moral, social and cultural development, their behaviour and personal safety.

Aims

The national curriculum for Life Skills Education has a focus across three core themes.

By the end of primary school students should know:

Core Theme 1: Health and Wellbeing
- what is meant by a healthy lifestyle
- how to maintain physical, mental and emotional health and wellbeing
- how to manage risks to physical and emotional health and wellbeing
- ways of keeping physically and emotionally safe
- about managing change, including puberty, transition and loss
- how to make informed choices about health and wellbeing and to recognise sources of help with this
- how to respond in an emergency
- to identify different influences on health and wellbeing

Core Theme 2: Relationships
- how to develop and maintain a variety of healthy relationships, within a range of social/cultural contexts
- how to recognise and manage emotions within a range of relationships
- how to recognise risky or negative relationships including all forms of bullying and abuse
- how to respond to risky or negative relationships and ask for help
- how to respect equality and diversity in relationships

Core Theme 3: Living in the Wider World

- about respect for self and others and the importance of responsible behaviours and actions
- about rights and responsibilities as members of families, other groups and ultimately as citizens
- about different groups and communities
- to respect diversity and equality and how to be a productive member of a diverse community
- about the importance of respecting and protecting the environment
- about where money comes from, keeping it safe and the importance of managing it effectively
- the part that money plays in people's lives
- a basic understanding of enterprise

Subject content

Key stage 1and 2

During Key Stages 1 and 2, learners gradually build on the skills, attitudes and values, knowledge and understanding they have started to acquire and develop during the Early Years Curriculum Framework. The LSE programme of study offers learning opportunities and experiences across the three core themes and aligns to the increasing independence and the physical and social awareness of learners as they move through the primary phase.

As a mandatory subject, LSE should be delivered as a weekly timetabled subject, although many aspects of the programme of study can be enhanced through a cross curricular approach with links to science, social studies, PE, and RE. Schools are free to determine how to deliver the content set out in this programme of study, in the context of a broad and balanced curriculum. Effective teaching in LSE will ensure that core knowledge is broken down into units of manageable size and communicated clearly to students, in a carefully sequenced way, within a planned programme or lessons. Teaching will include sufficient well-chosen opportunities and contexts for students to practise applying and embedding new knowledge so that it can be used skilfully and confidently in real life situations.

Core Theme 1. Health and wellbeing

Key Stage 1

Students should have the opportunity to learn:

H.1   what constitutes, and how to maintain, a healthy lifestyle including the benefits of physical activity, rest, healthy eating and dental health

H.2   to recognise what they like and dislike, how to make real, informed choices that improve their physical and emotional health, to recognise that choices can have good and not so good consequences

H.3   to think about themselves, to learn from their experiences, to recognise and celebrate their strengths and set simple but challenging goals

H.4   about good and not so good feelings, a vocabulary to describe their feelings to others and to develop simple strategies for managing feelings

H.5   about change and loss and the associated feelings (including moving home, losing toys, pets or friends)

H.6   the importance of, and how to, maintain personal hygiene

H.7   how some diseases are spread and can be controlled; the responsibilities they have for their own health and that of others; to develop simple skills to help prevent diseases spreading

H.8   about the process of growing from young to old and how people's needs change

H.9   about growing and changing and new opportunities and responsibilities that increasing independence may bring

H.10   that household products, including medicines, can be harmful if not used properly

H.11   rules for and ways of keeping physically and emotionally safe including responsible ICT use and online safety, road safety, cycle safety and safety in the environment, water and fire safety

H.12   about people who look after them, their family networks, who to go to if they are worried and how to attract their attention

H.13   about the ways that students can help the people who look after them to more easily protect them

H.14   to recognise that they share a responsibility for keeping themselves and others safe, when to say, 'yes', 'no', 'I'll ask' and 'I'll tell' including knowing that they do not need to keep secrets

H.15   what is meant by 'privacy'; their right to keep things 'private'; the importance of respecting others' privacy

Key Stage 2

Building on Key Stage 1, students should have the opportunity to learn:

1.1.   what positively and negatively affects their physical, mental and emotional health

1.2.   how to make informed choices (including recognising that choices can have positive, neutral and negative consequences) and to begin to understand the concept of a 'balanced lifestyle'

1.3.   to recognise opportunities and develop the skills to make their own choices about food, understanding what might influence their choices and the benefits of eating a balanced diet

1.4.   to recognise how images in the media (and online) do not always reflect reality and can affect how people feel about themselves

1.5.   to reflect on and celebrate their achievements, identify their strengths and areas for improvement, set high aspirations and goals

1.6.   to deepen their understanding of good and not so good feelings, to extend their vocabulary to enable them to explain both the range and intensity of their feelings to others

1.7.   to recognise that they may experience conflicting emotions and when they might need to listen to, or overcome these

1.8.   about change, including transitions (between key stages and schools), loss, separation, divorce and bereavement

1.9.   to differentiate between the terms, 'risk', 'danger' and 'hazard'

1.10.   to recognise, predict and assess risks in different situations and decide how to manage them responsibly (including sensible road use and risks in their local environment) and to use this as an opportunity to build resilience

1.11.   to recognise how their increasing independence brings increased responsibility to keep themselves and others safe

1.12.   that bacteria and viruses can affect health and that following simple routines can reduce their spread

1.13.   how pressure to behave in unacceptable, unhealthy or risky ways can come from a variety of sources, including people they know and the media

1.14.   to recognise when they need help and to develop the skills to ask for help; to use basic techniques for resisting pressure to do something dangerous, unhealthy, that makes them uncomfortable or anxious or that they think is wrong

1.15.   school rules about health and safety, basic emergency aid procedures, where and how to get help

1.16.   what is meant by the term 'habit' and why habits can be hard to change

1.17.   which, why and how, commonly available substances and drugs (including alcohol, tobacco and 'energy drinks') can damage their immediate and future health and safety; that some are restricted and some are illegal to own, use and give to others

1.18.   how their body will, and their emotions may, change as they approach and move through puberty

1.19.   about taking care of their body, understanding that they have the right to protect their body from inappropriate and unwanted contact and develop the skills and strategies required to get support if they have fears for themselves or their peers

1.20.   strategies for keeping physically and emotionally safe including road safety, and safety in the environment (including water and fire safety)

1.21.   strategies for keeping safe online; the importance of protecting personal information, including passwords, addresses and the distribution of images of themselves and others

1.22.   about people who are responsible for helping them stay healthy and safe; how they can help these people to keep them healthy and safe

1.23.   the responsible use of mobile phones: safe keeping (looking after it) and safe user habits (time limits, use of passcode, turning it off at night etc.)

1.24.   how to manage requests for images of themselves or others; what is and is not appropriate to ask for or share; who to talk to if they feel uncomfortable or are concerned by such a request

Core Theme 2: Relationships

Key Stage 1

Students should have the opportunity to learn:

R.1   to communicate their feelings to others, to recognise how others show feelings and how to respond

R.2   to recognise that their behaviour can affect other people

R.3   the difference between secrets and nice surprises (that everyone will find out about eventually) and the importance of not keeping any secret that makes them feel uncomfortable, anxious or afraid

R.4   to recognise what is fair and unfair, kind and unkind, what is right and wrong

R.5   to share their opinions on things that matter to them and explain their views through discussions with one other person and the whole class

R.6   to listen to other people and play and work cooperatively (including strategies to resolve simple arguments through negotiation)

R.7   to offer constructive support and feedback to others

R.8   to identify and respect the differences and similarities between people

R.9   to identify their special people (family, friends, carers), what makes them special and how special people should care for one another

R.10 to judge what kind of physical contact is acceptable, comfortable, unacceptable and uncomfortable and how to respond (including who to tell and how to tell them)

R.11 that people's bodies and feelings can be hurt (including what makes them feel comfortable and uncomfortable)

R.12 to recognise when people are being unkind either to them or others, how to respond, who to tell and what to say

R.13 to recognise different types of teasing and bullying, to understand that these are wrong and unacceptable

R.14 strategies to resist teasing or bullying, if they experience or witness it, whom to go to and how to get help

Key Stage 2

Building on Key Stage 1, students should have the opportunity to learn:

R.1 to recognise and respond appropriately to a wider range of feelings in others

R.2 to recognise what constitutes a positive, healthy relationship and develop the skills to form and maintain positive and healthy relationships

R.3 to recognise ways in which a relationship can be unhealthy and whom to talk to if they need support

R.4 to recognise different types of relationship, including those between acquaintances, friends, relatives and families

R.5 that their actions affect themselves and others

R.6 to judge what kind of physical contact is acceptable or unacceptable and how to respond

R.7 the concept of 'keeping something confidential or secret', when they should or should not agree to this and when it is right to 'break a confidence' or 'share a secret'

R.8 to listen and respond respectfully to a wide range of people, to feel confident to raise their own concerns, to recognise and care about other people's feelings and to try to see, respect and if necessary, constructively challenge others' points of view

R.9 to work collaboratively towards shared goals

R.10 to develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves

R.11 that differences and similarities between people arise from a number of factors, including family, cultural, ethnic, racial, age, sex, disability and religious diversity

R.12 to realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours (including cyber bullying, use of prejudice-based language, 'trolling', how to respond and ask for help)

R.13 to recognise and manage 'dares'

R.14 to recognise and challenge stereotypes

R.15 how to recognise bullying and abuse in all its forms (including prejudice-based bullying both in person, online and through social media)

R.16 to understand personal boundaries; to identify what they are willing to share with their most special people; friends; classmates and others; and that we all have rights to privacy

Core Theme 3: Living in the Wider World

Key Stage 1

Students should have the opportunity to learn:

L.1 how they can contribute to the life of the classroom and school

L.2 to help construct, and agree to follow, group, class and school rules and to understand how these rules help them

L.3 that people and other living things have rights and that everyone has responsibilities to protect those rights (including protecting others' bodies and feelings; being able to take turns, share and understand the need to return things that have been borrowed)

L.4 that they belong to different groups and communities such as family and school

L.5 what improves and harms their local, natural and built environments and develop strategies and skills needed to care for these (including conserving energy)

L.6 that money comes from different sources and can be used for different purposes, including the concepts of spending and saving

L.7 about the role money plays in their lives including how to keep it safe, choices about spending or saving money and what influences those choices

L.8 ways in which they are all unique; understand that there has never been and will never be another 'them'

L.9 ways in which we are the same as all other people; what we have in common with everyone else

L.10 about the 'special people' who work in their community and who are responsible for looking after them and protecting them; how people contact those special people when they need their help, including dialling 911 in an emergency

Key Stage 2

Building on Key Stage 1, students should have the opportunity to learn:

L.1 to research, discuss and debate topical issues, problems and events that are of concern to them and offer their recommendations to appropriate people

L.2 why and how rules and laws that protect them and others are made and enforced, why different rules are needed in different situations and how to take part in making and changing rules

L.3 to understand that there are basic human rights shared by all peoples and all societies and that children have their own special rights set out in the Cayman Islands Constitution Order, 2009

L.4 to realise the consequences of anti-social, aggressive and harmful behaviours such as bullying and discrimination of individuals and communities; to develop strategies for getting support for themselves or for others at risk

L.5 that they have different kinds of responsibilities, rights and duties at home, at school, in the community and towards the environment; to continue to develop the skills to exercise these responsibilities

L.6 to resolve differences by looking at alternatives, seeing and respecting others' points of view, making decisions and explaining choices

L.7 what being part of a community means, and about the varied institutions that support communities locally and nationally

L.8 to recognise the role of voluntary, community and pressure groups, especially in relation to health and wellbeing

L.9 to appreciate the range of national, regional, religious and ethnic identities in the Cayman Islands

L.10 to consider the lives of people living in other places, and people with different values and customs

L.11 about the role money plays in their own and others' lives, including how to manage their money and about being a critical consumer

L.12 to develop an initial understanding of the concepts of 'interest', 'loan', 'debt', and 'tax' (e.g. their contribution to society through the payment of indirect taxation such as duties on fuel and food items)

L.13 that resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment across the world

L.14   what is meant by enterprise and begin to develop enterprise skills

L.15   to explore and critique how the media present information

L.16   to critically examine what is presented to them in social media and why it is important to do so; understand how information contained in social media can misrepresent or mislead; the importance of being careful what they forward to others

Music programmes of study: key stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

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

Aims

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

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

Attainment targets

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

Subject content

Key stage 1

Students 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 2

Students 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.

Students 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 including the history of music of the Cayman Islands and the wider Caribbean.

Physical Education programmes of study: key stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of study

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

Aims

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

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

Attainment targets

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

Subject content

Key stage 1

Students should develop fundamental movement skills, become increasingly competent and confident and access a broad range of opportunities to extend their agility, balance and coordination, individually and with others. They should be able to engage in competitive (both against self and against others) and co-operative physical activities, in a range of increasingly challenging situations.

Students 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 2

Students 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.

Students 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, athletics, netball, swimming, hockey, 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.

Religious Education programmes of study: key stages 1 and 2

The English National Curriculum adapted for the Cayman Islands

August 2019

Purpose of Study

The national framework for religious education has four purposes, which mirror those of the English National Curriculum: 1) to establish an entitlement, 2) to establish standards, 3) to promote continuity and coherence, and 4) to promote governmentunderstanding. Christianity has shaped the history and traditions of the Cayman Islands and its people and continues to exert a significant influence on present life. Other major religions, such as Buddhism, Hinduism, Islam, Judaism and Sikhism, are represented in our islands to a lesser extent. It is important that while recognising the role of Christianity as the major religious tradition of this country, students should also be encouraged to develop understanding of and respect for people of other faiths and beliefs.

Religious Education is a component of the National Curriculum. The Ministry in collaboration with the Department of Education Services must produce a syllabus (scope and sequence) that is adhered to by all government schools.

To establish an entitlement: The national framework endorses an entitlement to learning in religious education for all students, irrespective of social background, culture, race, religion, gender, differences in ability and disabilities. This entitlement contributes to their developing knowledge, skills, understanding and attitudes. These are necessary for students' self-fulfilment and development as active and responsible citizens.

To establish standards: The national framework sets out expectations for learning and attainment that are explicit to students, parents, teachers, employers and the public. It establishes standards for the performance of all students in religious education. These standards may be used to support assessment for learning. They may also be used to help students and teachers set targets for improvement and evaluate progress towards them.

To promote continuity and coherence: The national framework for religious education seeks to contribute to a coherent curriculum that promotes continuity. It helps the transition of students between schools and phases of education and can provide a foundation for further study and lifelong learning.

To promote governmentunderstanding. The national framework for religious education aims to increase governmentunderstanding of, and confidence in, the work of schools in religious education. It recognises the large extent to which the

governmentis already involved with religious education, in the form of the Ministry of Education, Education Council, and the Department of Education Services. It encourages those who are interested to participate in enriching the provision of religious education.

Aims

The national curriculum for Religious education aims to ensure that all students:

- Develop knowledge and understanding of Christianity and other world religions
- Recognise religion as an important expression of human experiences
- Investigate and understand the questions and answers that religions can offer about the nature and meaning of life
- Develop their own beliefs, attitudes, moral values and practices through a process of personal search, discovery and critical evaluation
- Are encouraged to become active participants in their own learning by helping to establish learning success criteria, understanding and utilising metacognitive strategies, as well as on-going feedback from teachers and peers.

Attitudes in religious education

While the knowledge, skills and understanding are central to the national framework for religious education, it is also vital that religious education encourages students to develop positive attitudes to their learning and to the beliefs and values of others. The following four attitudes are essential for good learning in religious education and should be developed at each stage or phase of religious education:

- self-awareness
- respect for all
- open-mindedness
- appreciation and wonder

Self-awareness in religious education includes students:

- feeling confident about their own beliefs and identity and sharing them without
- fear of embarrassment or ridicule
- developing a realistic and positive sense of their own religious, moral and
- spiritual ideas
- recognising their own uniqueness as human beings and affirming their self-worth
- becoming increasingly sensitive to the impact of their ideas and behaviour on

- other people

Respect for all in religious education includes students:

- developing skills of listening and a willingness to learn from others, even when
- others' views are different from their own
- being ready to value difference and diversity for the common good
- appreciating that some beliefs are not inclusive and considering the issues that
- this raises for individuals and society
- being prepared to recognise and acknowledge their own biases
- being sensitive to and tolerant of the feelings and ideas of others

Open-mindedness in religious education includes students:

- being willing to learn and gain new understanding
- engaging in argument or disagreeing reasonably and respectfully (without
- belittling or abusing others) about religious, moral and spiritual questions
- being willing to go beyond surface impressions
- distinguishing between opinions, viewpoints and beliefs in connection with
- issues of conviction and faith

Appreciation and wonder in religious education includes students:

- developing their imagination and curiosity
- recognising that knowledge is bounded by mystery
- appreciating the sense of wonder at the world in which they live
- developing their capacity to respond to questions of meaning and purpose.

Attainment targets

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

Subject content

Key stage 1

Introduction

Throughout key stage 1, students learn about Christianity and at least one other principal religion. They learn different beliefs about God and the world around them. They encounter and respond to a range of stories, artefacts, symbols, and other religious materials. They learn to recognize that beliefs are expressed in a variety of ways, and begin to use specific vocabulary.   They begin to understand the importance and value of religion and belief, especially for other children and their families. Students ask relevant questions and develop a sense of wonder about the world, using their imaginations. They talk about what is important to them and others, valuing themselves, reflecting on their own feelings and experiences, and developing a sense of belonging.

Knowledge, skills and understanding

Learning about religion

Students should be able to:

- explore a range of religious stories and sacred writings and talk about their meanings
- name and explore a range of celebrations, worship and rituals in religion, noting similarities where appropriate
- identify the importance, for some people, of belonging to a religion and recognise the difference this makes to their lives
- explore how religious beliefs and ideas can be expressed through the arts and communicate their responses
- identify and suggest meanings for religious symbols and begin to use a range of religious words.

Learning from religion

Students should be able to:

- reflect on and consider religious and spiritual feelings,
- experiences and concepts such as worship, wonder, praise, thanks, concern, joy and sadness
- ask and respond imaginatively to puzzling questions, communicating their ideas
- identify what matters to them and others, including those with religious commitments, and communicate their responses
- reflect on how spiritual and moral values relate to their own behavior
- recognise that religious teachings and ideas make a difference to individuals, families and the local community

Breadth of study

During the key stage, students should be taught the knowledge, skills and understanding through the following areas of study:

Religions and beliefs:

- Christianity
- at least one other principal religion (Judaism)
- a religious community with a significant local presence, where appropriate

Themes

- believing: what people believe about God, humanity and the natural world
- story: how and why some stories are sacred and important in religion
- celebrations: how and why celebrations are important in religion
- symbols: how and why symbols express religious meaning
- leaders and teachers: figures who have an influence on others locally, nationally and globally in religion
- belonging: where and how people belong and why belonging is important
- myself: who I am and my uniqueness as a person in a family and community

Experiences and opportunities

- visiting places of worship and focusing on symbols and feelings
- listening and responding to visitors from local faith communities
- using their senses and having times of quiet reflection
- using art and design, music, dance and drama to develop their creative talents and imagination
- sharing their own beliefs, ideas and values and talking about their feelings and experiences
- beginning to use ICT to explore religions and beliefs as practised in the local and wider community.

Key stage 2

Introduction

Throughout key stage 2, students learn about Christianity and at least two of the other principal religions, recognising the impact of religion and belief locally, nationally and globally. They make connections between differing aspects of religion and consider the different forms of religious expression. They consider the beliefs, teachings, practices and ways of life central to religion. They learn about sacred texts and other sources and consider their meanings. They begin to recognise diversity in religion, learning about similarities and differences both within and between religions and beliefs and the importance of dialogue between them. They extend the range and use of specialist vocabulary. They recognise the challenges involved in distinguishing between ideas of right and wrong, and valuing what is good and true. They communicate their ideas, recognising other people's viewpoints. They consider their own beliefs and values and those of others in the light of their learning in religious education.

Knowledge, skills and understanding

Learning about religion

Students should be able to:

- describe the key aspects of religions, especially the people, stories and traditions that influence the beliefs and values of others
- describe the variety of practices and ways of life in religions and understand how these stem from, and are closely connected with, beliefs and teachings
- identify and begin to describe the similarities and differences within and between religions
- investigate the significance of religion in the local, national and global communities
- consider the meaning of a range of forms of religious expression, understand why they are important in religion and note links between them
- describe and begin to understand religious and other responses to ultimate and ethical questions
- use specialist vocabulary in communicating their knowledge and understanding
- use and interpret information about religions from a range of sources.

Learning from religion

Students should be able to:

- reflect on what it means to belong to a faith community, communicating their own and others' responses
- respond to the challenges of commitment both in their own lives and within religious traditions, recognising how commitment to a religion is shown in a variety of ways
- discuss their own and others' views of religious truth and belief, expressing their own beliefs.
- reflect on ideas of right and wrong and their own and others' responses to them
- reflect on sources of inspiration in their own and others' lives.

Breadth of study

During the key stage, students should be taught the **knowledge, skills and understanding** through the following areas of study:

Religions and beliefs

- Christianity (possibly look at different denominations such as Roman Catholic, Eastern Orthodox, Oriental Orthodox, Anglican, and Protestant)
- at least two other principal religions (for example: Buddhism, Hinduism, Islam, Judaism and Sikhism)
- ca religious community with a significant local presence, where appropriate

Themes

- beliefs and questions: how people's beliefs about God, the world and others impact on their lives
- teachings and authority: what sacred texts and other sources say about God, the world and human life
- worship, pilgrimage and sacred places: where, how and why people worship, including at particular sites
- the journey of life and death: why some occasions are sacred to believers, and what people think about life after death
- symbols and religious expression: how religious and spiritual ideas are expressed
- inspirational people: figures from whom believers find inspiration

- religion and the individual: what is expected of a person in following a religion or belief
- religion, family and community: how religious families and communities practise their faith, and the contributions this makes to local life
- beliefs in action in the world: how religions and beliefs respond to global issues of human rights, fairness, social justice and the importance of the environment

Experiences and opportunities

- encountering religion through visitors and visits to places of worship, and focusing on the impact and reality of religion on the local and global community
- discussing religious and philosophical questions, giving reasons for their own beliefs and those of others
- considering a range of human experiences and feelings
- reflecting on their own and others' insights into life and its origin, purpose
- and meaning
- expressing and communicating their own and others' insights through art and
- design, music, dance, drama and ICT
- developing the use of ICT, particularly in enhancing students' awareness of
- religions and beliefs globally.

Social Studies programmes of study: key stages 1 and 2

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Purpose of Study

In the Cayman Islands' curriculum, students will achieve these aims by developing knowledge and understanding of human society. Social studies encompasses the disciplines of history, geography and sociology. It also draws upon aspects of economics and anthropology. It is the study of people in relation to each other and to the world in which they live. As a study of human beings in their physical, social and cultural environments, social studies examines the past and present and looks towards the future.

Students will develop skills as they use the social studies processes of inquiry, values, exploration and social decision- making to learn about society and to enable them to value their roots, explore their pasts, understand their contexts and participate responsibly in society.

Aims

The national curriculum for social studies aims to ensure that all students:

- develop the knowledge and skills which will help them make informed and reasoned decisions that result in responsible and active citizenship in a democratic society
- are able to participate in a changing society as informed, confident, and responsible citizens
- value their roots and foster a sense of belonging to the Cayman Islands
- know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to present day: how people's lives have shaped this nation and how the Cayman Islands has influenced and been influenced by the wider world.
- understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts, including written narratives and analyses
- understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time
- develop contextual knowledge of the location of local and globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- are competent in the geographical skills needed to:
  - Collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes
  - Interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)
  - Communicate geographical information in a variety of ways including through maps, numerical and quantitative skills and writing at length
- are enthusiastic and motivated about learning, and willing to continue to extend their knowledge and skills after leaving school

- are well rounded, good at finding solutions to problems, flexible and adaptable to changing circumstances and demands
- have an awareness of global issues affecting life in the 21st century
- become active participants in their own learning by helping to establish learning success criteria, understanding and utilising metacognitive strategies, critical thinking, as well as using and responding to feedback from teachers and peers

Spoken Language

The national curriculum for social studies reflects the importance of spoken language in students' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that students hear and speak are key factors in developing vocabulary and being able to articulate their thoughts clearly and precisely. English is the national language in the Cayman Islands, and many students learn/speak a dialect of English at home that reflects the rich cultural and linguistic heritage of the islands.

Programme of Study

The programmes of study for social studies are set out for key stages 1 and 2. Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study. In addition, schools can introduce key stage content during an earlier stage if appropriate. All schools are also required to set out their programme of study for social studies on a year-by-year basis.

Sequencing the programme of study

The sequence of the topics in the social studies programme of study is based on an expanding environment approach. Such an approach allows students to first look at topics that are familiar and gradually proceed to topics that are less familiar. The programme begins in Key Stage 1 where students examine their immediate environment and community whilst looking at aspects of the Cayman Islands and the wider world. In Key Stage 2, students continue to study our country but broaden their viewpoint to study our neighbouring countries and the rest of the world as it relates to our country and region.

Attainment targets

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

Indicators

An indicator is an example of the behaviour that students may display as they work towards the attainment targets.   Indicators reflect and describe aspects of knowledge, understanding, skills and values.   Attainment targets and indicators together assist teachers in identifying student's current achievement and in planning future learning experiences.

The Strands

The social studies curriculum is divided into three strands:

i.   Social organisation, Civics and Economics:

Students examine people's organisation in groups and the rights, roles, responsibilities and needs of people as they interact within groups. They look at how people participate in economic activities and about the consumptions, production, and distribution of goods and services. They also learn how to manage their needs that often exceed the limited resources and the role of interdependency and technology in economic decision making. Students will also gain an understanding of historical development of structures of power, authority and governance and their evolving functions in the Cayman Islands as well as in other parts of the world – which is essential for developing civic competence. Through this strand, learners will study the importance of civic participation, the meaning of citizenship, balance between rights and responsibilities and the role of the citizen whilst exploring ways to contribute to society and make a positive difference.

ii.   Geography and the Environment:

Students investigate a variety of environments at different scales, in the Cayman Islands and contrasting areas abroad and start to make links between different places in the world. Studying the human-environment interaction assists learners in understanding the relationship that exists between people and the environment and to make informed and critical decisions about the relationship between human beings and their environment. Students carry out geographical enquiry and in doing this they ask geographical questions about people, places and environments, and use geographical skills and resources such as globes, maps, atlases, and photographs. They begin to discuss the human impact on the environment.

iii.   History, Culture and Identity:

Students develop an awareness of their own past and the past of the Cayman Islands, and aspects of life which have changed over time. Students learn relationships between people and events, through time, to interpret these relationships and actions and the ways in which they have changed. This helps students understand what things were like in the past and how things change and develop so they can imagine possible futures. Students recognize the systems that influence culture and therefore adapt to dynamic and ever-changing culture. Students begin to understand multiple perspectives of cultures and the culture of the Cayman Islands: the different systems of belief, values and traditions. Along with culture, students will learn to examine how human behaviour, social norms, heritage and individual action influence their identity.

This division into strands is a convenient way of emphasizing the outcomes for social studies in schools. It does not mean that learning in each strand has to be developed independently.

Progression in this subject requires students to develop their skills in investigating, exchanging information and evaluating alongside their knowledge and understanding. They should start with activities linked to themselves and their immediate environment and move on to less familiar situations and contexts. Progression is shown through the different expectations at each key stage.

Progress in social studies can be characterized by:

- Acquiring wider and more detailed knowledge of Caymanian and world history and geography
- Deepening understanding of the meaning of symbols, events and practices
- More fluent and competent use of maps, globes and map skills
- Increased levels of skills in responding to questions of identity, meaning, purpose, values and commitment
- Showing respect for the world's people and cultures through a commitment to human rights, equity and the dignity of all persons
- Understanding the role humans play in being good stewards of the world
- Understanding the history and foundations of parliamentary democracy in the Cayman Islands

Programme of Study for Key Stage 1

Strand i: Social Organisation, Civics and Economics

Students will be able to:

- identify what a group is and demonstrate an understanding of its importance. For example, family, school, community
- demonstrate an understanding that people within groups have rights and responsibilities
- identify the characteristics of good citizens
- understand the importance of rules and laws
- recognise the place of needs, wants and choices and why certain choices are made
- describe different types of work/jobs that people do including those in the tourism field
- recognise that the Cayman Islands is governed by an elected Government

Strand ii: Geography and the Environment

Students will be able to:
- name and locate the world's seven continents and five oceans
- name, locate and identify characteristics of the three islands in the Cayman Islands, the capital, and the districts in all three islands
- use world maps, atlases and globes to identify the Cayman Islands, as well as the 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
- identify seasonal (wet and dry seasons) and daily weather patterns in the Cayman Islands 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:
  - o key physical features, including: beach, cliff, coast, bluff, ironshore, hill, swamp, mountain, river, sea, ocean, soil, sand, vegetation
  - o key human features, including: town, district, farm, house, office, port, harbour, bypass, roundabout, shop
- 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

- describe local environmental problems and individual roles in minimizing them

- identify negative changes caused by human impact such as flooding, pollution, coastal erosion

- identify positive changes caused by human impact such as conservation including beach cleaning, fishing seasons, and recycling

Strand iii: History, Culture and Identity

Students will be able to:

- recognise and value themselves as an important human being
- identify changes within living memory; where appropriate these changes should reveal aspects in national life
- recognise events beyond living memory that are significant nationally including historical events, people and places in the Cayman Islands. For example: discovery, early settlement, the establishment of the Coat of Arms, Christopher Columbus, William Eden and Treaty of Madrid
- recognise that families have varied traditions, rituals and celebrations
- recognise that time and change affects families
- demonstrate an understanding that the way people live in their community evolves over time including past industries such as our seafaring past
- identify the National symbols and their significance including the National Song, National Tree, National Bird, National Flower, Coat of Arms, the Flag
- identify basic features of culture, their own culture and the culture and heritage of the Cayman Islands
- participate in traditional songs, games and dances of Caymanian heritage
- recognize and describe ways societies around the world express themselves. For example: celebrations, music, dance, food, storytelling, art
- experience Caymanian culture and heritage through the participation of community visitors and site visits

Programme of Study for Key Stage 2

Strand i: Social Organisation, Civics and Economics

Students will be able to:

- explore the characteristics that promote the rights and responsibilities of good citizens
- explain how groups develop rules/laws for behaviour and explain how behaviours promote or hinder cooperation
- demonstrate an understanding of the Government of the Cayman Islands and the chronological history of its development (including the relationship between the Cayman Islands and the United Kingdom and the Monarchy. Including the relationship with Jamaica, the first Constitution, vestrymen and the right to vote for women).
- demonstrate an understanding of the importance of a government to a country and explore the various branches
- recognise that human needs and wants differ in situations due to different factors
- demonstrate an understanding of how communities depend on each other for the exchange of goods and services
- identify resources and recognize how they are obtained
- recognize how international trade occurs
- explain how supply and demand affects prices
- realise the relationship between price and quantity, spending and saving
- describe migration and some of its causes
- identify and describe the importance of increasing local products (goods and services)

Strand ii: Geography and the Environment

Students will be able to:

- locate the world's countries, using maps to focus on the Caribbean region, and North America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate the islands in the Caribbean and their capitals, geographical regions and their identifying human and physical characteristics, key topographical features (including mangroves, coral reefs, 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)

▪ understand geographical similarities and differences through the study of human and physical geography of a region in the Cayman Islands, the Caribbean region, and a region within North or South America

▪ Describe and understand key aspects of:
  o physical geography, including: climate zones, rivers, mountains, volcanoes, hurricanes, earthquakes, and the water cycle
  o human geography, including: types of settlement, land use and the distribution of natural resources including energy, food, minerals and water

▪ compare natural and built features of the Cayman Islands and of other countries

▪ 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 keys to build their knowledge of the Cayman Islands 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.

▪ differentiate weather and climate and describe appropriate safety procedures during bad weather

▪ identify and explain local and global environmental problems and individual roles in minimizing them

Strand iii: History, Culture and Identity

Students will be able to:

▪ recognise individual differences in themselves and others and show appreciation of those differences

▪ identify the unique features of the Cayman Islands and their national identity

▪ identify the achievements of the earliest civilisations – an overview of where and when the first civilizations appeared and an in-depth study of the following: the Aztecs and Ancient Egypt

▪ make connections between modern life and similar elements from early civilisations

▪ discuss the chronological history of the Cayman Islands including land grants, emancipation

▪ describe how the ideas and actions of people in the past changed the lives of others including Long Ceilia, Thomas Hubbel, our National Heroes, Sir Vassel Johnson, Sir Francis Drake

- describe ways in which time and change affect communities including the change of architecture and use of olden remedies and artifacts
- describe why and how individuals and groups pass on/ preserve their culture and heritage
- explain ways in which the movement of people affects cultural diversity and interaction
- recognise the features of culture and heritage, including the heritage of the Cayman Islands
- recognise the cultural significant days and topical events for example National Heroes Day, Remembrance Day, Queen's Birthday, Pirates Week
- experience Caymanian culture and heritage through the participation of community visitors and site visits