3 National Curriculum in England

Aims

3.1 The national curriculum provides pupils with an introduction to the essential knowledge that they need to be educated citizens. It introduces pupils 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 pupils' knowledge, understanding and skills as part of the wider school curriculum.

4 Inclusion

4.1 Teachers should set high expectations for every pupil. They should plan stretching work for pupils whose attainment is significantly above the expected standard. They have an even greater obligation to plan lessons for pupils who have low levels of prior attainment or come from disadvantaged backgrounds.

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

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 pupils have special educational needs, many of whom also have disabilities. Lessons should be planned to ensure that there are no barriers to every pupil achieving. In many cases, such planning will mean that these pupils will be able to study the full national curriculum. The SEN Code of Practice includes advice on approaches to identification of need which can support this. A minority of pupils will need access to specialist equipment and different approaches. The 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 pupils 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 pupils 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 pupils whose first language is not English. Monitoring of progress should take account of the pupil's age, length of time in this country, previous educational experience and the language they use in other learning.

4.6 The ability of pupils 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 pupils develop their English and should aim to provide the support pupils need to take part in all subjects.

NUMERACY AND MATHEMATICS

Aims

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

5.2 Teachers should develop pupils' number sense and mathematical reasoning in all subjects so that they understand and appreciate the importance of mathematics. Pupils should be taught to apply arithmetic fluently to problems, understand and use measures, make estimates and sense check their work. Pupils should apply their geometric and algebraic understanding, and relate 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.

6.1 Teachers should develop pupils' 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 pupils, 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 Pupils should be taught to speak clearly and convey ideas confidently using Standard English. Pupils should use discussion in order to learn; they should be taught the meaning of instruction verbs that they may meet in examination questions. Pupils 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 pupils' reading and writing in all subjects to support their acquisition of knowledge. Pupils 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. Pupils 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 read or heard.

Vocabulary development

6.4 Pupils' 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 pupils' current knowledge. They should increase pupils' 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, pupils expand the vocabulary choices that are available to them when they write. In addition, it is vital for pupils' comprehension that they understand the meanings of words they meet in their reading as well as all subjects, and older pupils should be taught the meaning of instruction verbs that they may meet in examination questions. It is particularly important to induct pupils into the language which defines their subject in its own right, such as accurate mathematical and scientific language.

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ENGLISH

Purpose of study

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

Aims

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

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

MATHEMATICS

Purpose of study

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

Aims

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

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

SCIENCE

Purpose of study

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

Aims

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

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

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

Aims
The national curriculum for art and design aims to ensure that all pupils:
- produce creative work, exploring their ideas and recording their experiences
- become proficient in using a range of media and techniques
- evaluate and analyse creative work by pupils, learning from a wide range of artists, craft makers and designers
- know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms

COMPUTING

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

Aims
The national curriculum for computing aims to ensure that all pupils:
- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, confident and creative users of information and communication technology

GEOGRAPHY

Purpose of study
A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people which will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, peoples and natural environments, together with a deep understanding of the Earth’s physical and human processes. As pupils progress, their growing knowledge about the world should help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments.

Aims
The national curriculum for geography aims to ensure that pupils:
- know accurate geographical knowledge, understanding and skills provide the frameworks for their history, and contribute to the culture, creativity and wealth of our nation
- know how places can be described and represented
- understand the formation and use of landscapes and environments
- know about the processes, and of the creation and use of landscapes and environments, together with the natural and human environments

PHYSICAL EDUCATION

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

Aims
The national curriculum for physical education aims to ensure that all pupils:
- develop competent 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

DESIGN TECHNOLOGY

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

Aims
The national curriculum for design and technology aims to ensure that all pupils:
- develop the creative, technical and practical expertise needed to perform everyday tasks as well as participate in successions such as technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook

HISTORY

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

Aims
The national curriculum for history aims to ensure that all pupils:
- know and understand significant aspects of the history of the wide world
- know about and understand significant aspects of the history of the wider world
- can use chronology to sequence historical events
- can use different sources to find out about the past
- can use historical evidence, sift arguments, and develop perspective and judgement

LANGUAGES

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

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

MUSIC

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

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