1. Numeracy and mathematics

1.1

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.

1.2

Teachers should develop pupils' numeracy 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 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.

2. Language and literacy

2.1

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

2.2

Pupils 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
2.3

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 heard or read.

Vocabulary development
2.4

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 across 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 each subject in its own right, such as accurate mathematical and scientific language.

3. Programmes of study and attainment targets
3.1

The following links set out the statutory programmes of study and attainment targets for all subjects except for science at key stage 4.

- [English](#)
- [mathematics](#)
- [science](#)
- [art and design](#)
- [citizenship](#)
- [computing](#)
- [design and technology](#)
- [geography](#)
- [history](#)
- [languages](#)
- [music](#)
- [physical education](#)