## KS3 Level 1

Students demonstrate very limited computational skills in the form of understanding algorithms, programming, computer systems, and networks.

They can navigate on-screen resources to explore and locate information, and work with digital information technology to view and retrieve data, whilst following instructions to be safe online.

### KS3 Level 2

Students can demonstrate a limited understanding of computational skills, programming, computer systems, and computer networks.

They find and use information to answer questions and use simple formatting to present and communicate their work to others following instructions on safe use.

# KS3 Level 3

Students can demonstrate some computational skills through listing basic steps to solve problems, programming simple solutions, and identifying components of computer systems and networks.

Their digital information technology skills include searching for information from a range of sources to make straightforward judgements. Strategies for staying safe are used to communicate and share their ideas and digital artefacts with others.

#### KS3 Level 6

Students can demonstrate and justified computational skills through efficient algorithms that include subroutines, as well as suggest the components of computer systems and networks, while explaining how they meet specific purposes.

Their understanding of data storage, the identification of online risks, and the planning and creation of digital artefacts for specific audiences, all demonstrate a wide range of integrated digital information technology skills.

## KS3 Level 5

Students can demonstrate a range of computational skills in the planning and creation of precise programs to solve problems. The components of computer systems and networks have been clearly identified with their use explained with some justification.

They use their digital information technology skills to check the accuracy and organise researched information and can discuss and present their knowledge through well planned and prepared digital artefacts, for specific purposes and audiences.

## KS3 Level 4

Students can demonstrate some computational understanding in the planning, writing, testing and refining of algorithms and programs to solve problems, and in the identification of computer system and network components.

Their digital information technology skills including managing some of the risks of online communication, refining and interpreting their data searches whilst questioning its reliability and plausibility.

### KS3 Level 7

Students can clearly demonstrate their programming and computational thinking skills in the creation of solutions, which are complemented by their ability to design and implement computer systems, translated from needs expressed in ordinary language.

Their sound digital information technology skills are demonstrated by their awareness of staying safe online, combining information from a variety of sources, identifying advantages, and presenting digital artefacts to different audiences.

### KS3 Level 8

Students can independently and comprehensively demonstrate their computational skills through the evaluation of real-world situations represented in algorithms and programs. The purpose and use of computer systems and networks are fully justified.

Their thorough digital information technology skills are presented through well planned, created, refined and evaluated digital artefacts, and the discussion of data storage, online safety, social, economic, ethical and moral issues that are raised by its use.

