Key Stage 3 Summary of Progress

Age Expected Indicators for Computing

Progress Code	Year 7	Year 8	Year 9
Significantly Below Age Expectation	• Is able to express simple real-world algorithms symbolically. • Understands why we decompose problems into smaller sections. • Can design simple linear programs in Scratch using the online help systems. • Uses items of software to and present digital content. Can make some improvement to solutions. • Demonstrates use of computers safely and responsibly, knowing a range of ways to report unacceptable content.	• Is able to express simple linear algorithms symbolically. • Uses technology to display digital content. Uses a variety of software to present digital content of various types. • Recognises what is acceptable and unacceptable behaviour when using technologies and online services. • Can explain how to avoid negative aspects of the online world. • Understands the differences between types of network.	• Understands what an algorithm is and is able to express simple linear algorithms symbolically. • Can design very simple linear programs in a textual language. • Uses technology to organise digital content. Uses a variety of software to manipulate and present digital content, data and information. Can make limited improvements using feedback. • Recognises and understands what acceptable and unacceptable behaviour is when using technologies and online services. • Understands that computers use binary rather than denary number systems.
Below Age Expectation	• Understands what an algorithm is and is able to express simple real-world algorithms symbolically. • Understands why we decompose problems into smaller sections and can perform examples. • Can design simple linear programs in Scratch without using the online assistant. • Uses a variety of software to manipulate and present digital content. Shares their experiences of technology in school and beyond the classroom. Can make some improvement to solutions based on feedback received. • Demonstrates use of computers safely and responsibly, knowing a range of ways to	• Understands what an algorithm is and is able to express simple linear algorithms symbolically. • Uses technology to purposefully organise digital content. Uses a variety of software to manipulate and present digital content, data and information. • Recognises and understands what is acceptable and unacceptable behaviour when using technologies and online services. • Understands the differences between types of network and when they are appropriate to use.	• Understands what an algorithm is and is able to express simple algorithms symbolically. • Can design simple linear programs in a textual language. • Uses technology with increasing independence to purposefully organise digital content. Uses a variety of software to manipulate and present digital content, data and information. Talks about their work and makes improvements to solutions based on feedback received. • Recognises what is acceptable and unacceptable behaviour when using technologies and online services.

	report unacceptable content. Shows some awareness of the quality of digital content collected.		• Understands that computers use binary rather than denary number systems, and can convert simple binary numbers to denary.
Working At Age Expectation	• Understands what an algorithm is and is able to express more complex real-world algorithms symbolically. • Understands why we decompose problems into smaller sections and can perform examples. Understands and can express the concept of abstraction. • Can design simple linear programs in Scratch and can use looping of program code. • Uses a variety of software to manipulate and present digital content, data and information. Shares their experiences of technology in school and beyond the classroom. Talks about their work and makes improvements to solutions based on feedback received. • Demonstrates use of computers safely and responsibly, knowing a range of ways to report unacceptable content. Shows some awareness of the quality of digital content collected.	• Understands what an algorithm is and is able to express simple linear algorithms symbolically. Understands that computers need precise instructions. • Uses technology with increasing independence to purposefully organise digital content. Uses a variety of software to manipulate and present digital content, data, and information. Talks about their work and makes improvements to solutions based on feedback received. • Recognises what is acceptable and unacceptable behaviour when using technologies and online services. • Understands the differences between types of network and when they are appropriate to use. Can explain which type is suitable for a given scenario.	• Understands that algorithms are implemented on digital devices as programs. Designs simple algorithms using selection. Uses logical reasoning to predict outcomes. Detects and corrects errors in algorithms. • Can design programs using selection in a textual language. • Recognises the audience when designing and creating digital content. Uses criteria to evaluate the quality of solutions, can identify improvements making some refinements to the solution. • Demonstrates responsible use of technologies and online services, understands the disadvantages of online services, and knows how to report concerns. • Understands why computers use binary rather than denary number systems, and can convert simple binary numbers to denary and vice versa.
Above Age Expectation	• Understands what an algorithm is and is able to express simple linear algorithms symbolically. Understands that computers need precise instructions. • Understands why we decompose problems into smaller sections and can perform examples. Understands and can express the concept of abstraction, and can perform abstraction given an example.	• Understands that algorithms are implemented on digital devices as programs. Uses logical reasoning to predict outcomes. Detects and corrects errors in algorithms. • Recognises the audience when designing and creating digital content. Uses criteria to evaluate the quality of solutions, can	• Understands that algorithms are implemented on digital devices as programs. Designs simple algorithms using loops and selection. Uses logical reasoning to predict outcomes. Detects and corrects errors in algorithms. • Can design programs using selection and iteration in a textual language.

	• Can design more complex programs in Scratch and can use looping and branching of program code. • Creates digital content to achieve a given goal through combining software packages and internet services to communicate with a wider audience. Talks about their work and makes improvements to solutions based on feedback received. • Recognises what is acceptable and unacceptable behaviour when using technologies and online services.	• identify improvements making some refinements to the solution. • Demonstrates responsible use of technologies and online services, and knows a range of ways to report concerns. • Understands the differences between types of network and when they are appropriate to use. Can explain which type is suitable for a given scenario. Can talk about suitable uses for cloud computing.	• Evaluates the appropriateness of digital devices, internet services and application software to achieve given solutions. • Recognises ethical issues surrounding the application of information technology beyond the school environment. • Understands why computers use binary rather than denary number systems, and can convert simple binary numbers to denary and vice versa. Understands why hexadecimal notation is used and can make simple conversions to denary.
Significantly Above Age Expectation	• Understands what an algorithm is and is able to express simple linear and branching algorithms symbolically. Understands that computers need precise instructions. Demonstrates care and precision to avoid errors. • Understands why we decompose problems into smaller sections and can perform examples. Understands and can express the concept of abstraction, and can perform abstraction given an example. Understands the idea of pattern recognition and its use. • Can design complex programs in Scratch and can use multiple examples of looping and branching of program code. • Recognises the audience when designing and creating digital content. Uses criteria to evaluate the quality of solutions, can identify improvements making some refinements to the solution, and future solutions.	• Understands that algorithms are implemented on digital devices as programs. Uses logical reasoning to predict outcomes. Detects and corrects errors in algorithms. • Evaluates the appropriateness of digital devices, internet services and application software to achieve given goals. Designs criteria to critically evaluate the quality of solutions, uses the criteria to identify improvements and can make appropriate refinements to the solution. • Recognises ethical issues surrounding the application of information technology beyond the school environment. • Understands the differences between types of network and when they are appropriate to use. Can talk about suitable uses for cloud computing and the advantages and disadvantages over local storage.	• Creates programs that implement algorithms to achieve given goals. Knows how to assign variables. Uses post-tested loop, and a sequence of selection statements in programs, including an if, then and else statement. • Can design more complex programs using selection and iteration in a textual language. • Evaluates the trustworthiness of digital content and considers the usability of visual design features when designing and creating digital artefacts for a known audience. Designs criteria for users to evaluate the quality of solutions, uses the feedback from the users to identify improvements and can make appropriate refinements to the solution. • Recognises that persistence of data on the Internet requires careful protection of online identity and privacy. Explains and justifies how the use of technology impacts on society, from the perspective

	• Demonstrates responsible use of technologies and online services and knows a range of ways to report concerns.		• of social, economic, political, legal, ethical, and moral issues. • Understands why computers use binary rather than denary number systems, and can convert simple binary numbers to denary and vice versa. Understands why hexadecimal notation is used and can perform conversions from binary and denary.

Learning Review Window 1	Learning Review Window 2
Tuesday 9th January 2024 until Friday 26th January 2024	Monday 17th June 2024 until Friday 5th July 2024
During these learning review windows students will be assessed in each of their subjects against the progress codes outlined. The actual date and nature of these assessments will be outlined by individual subject teachers ahead of the learning review window. *Assessment summary reports, including information about attendance and attitude to learning are issued following these learning review windows.*	