



YEAR 3 COMPUTING KNOWLEDGE

Computer Literacy

- Know how to use a keyboard and mouse to navigate and control computer applications effectively
- Know how to create basic documents and presentations using word processing and presentation software
- Know the basic functions of different computer system components such as the monitor, CPU, and keyboard

Programming

- Understand how to create simple programs using visual programming languages such as Scratch
- Know how to identify and correct errors in simple programs
- Understand how to apply basic programming constructs such as loops and conditionals to solve simple problems

Online Safety and Communication

- Know how to recognise and avoid potential online dangers such as inappropriate content and strangers
- Understand basic concepts of online communication and how to communicate safely and effectively
- Know how to recognise and protect personal information online

Computational Thinking

- Understand how to identify and define problems and break them down into smaller, more manageable parts
- Know how to use logical reasoning and prediction to test and improve programs
- Understand how to apply computational thinking skills to solve simple problems



YEAR 4 COMPUTING KNOWLEDGE

Computer Literacy

- Know how to use a range of software applications and peripherals for different purposes
- Understand the basics of computer hardware and software design and their implications for computer performance
- Know how to develop basic troubleshooting skills to resolve software and hardware issues

Programming

- Understand how to develop more complex programs using visual programming languages
- Know how to create and implement algorithms to solve problems
- Understand how to apply abstraction techniques to manage program complexity

Online Safety and Communication

- Understand and follow online etiquette and responsible online behavior
- Know how to recognise and respond to cyberbullying and other forms of online harassment
- Know how to protect personal privacy and security online

Computational Thinking

- Know how to develop and debug programs that accomplish specific goals
- Understand and use common data structures such as arrays and lists
- Apply computational thinking to solve problems of increasing complexity



YEAR 5 COMPUTING KNOWLEDGE

Computer Literacy

- Understand how to create and edit digital content such as images and videos using a range of software applications and tools
- Understand basic principles of programming languages and web development
- Know how to develop basic skills to create simple web pages

Programming

- Know how to use programming languages such as Swift to create more advanced programs
- Understand and use more complex programming constructs such as functions and variables
- Develop skills in testing and debugging programs

Online Safety and Communication

- Understand and recognise the risks associated with online activity and behavior
- Develop strategies for staying safe online, including privacy and security measures
- Understand and follow responsible online behavior, including proper attribution and citation of online sources

Computational Thinking

- Know how to develop and apply algorithms to solve more complex problems
- Use decomposition to break down problems into smaller, more manageable parts
- Understand and use variables, loops, and conditionals to solve problems



YEAR 6 COMPUTING KNOWLEDGE

Computer Literacy

- Know how to design and create simple programs and applications using programming languages and development tools
- Understand the basics of hardware and software design and their implications for computer performance
- Understand the basics of networking and internet technologies

Programming

- Understand and use more complex programming concepts such as functions and recursion
- Develop skills in testing and debugging more complex programs
- Understand how to write more complex code using a simple programming language, such as Swift

Online Safety and Communication

- Understand how to use search engines and evaluate the reliability of online sources
- Understand how to communicate effectively and appropriately online, considering the audience and purpose
- Analyze the impact of digital technologies on society, including ethical considerations and potential risks.

Computational Thinking

- Develop and use computational models to represent and simulate real-world phenomena
- Understand and use search and sorting algorithms to solve problems
- Understand the basics of logical reasoning and how it is applied in programming