


Computing Progression of Skills and Knowledge

	Year 3	Year 4	Year 5	Year 6
Computing systems and networks	Connecting computers <ul style="list-style-type: none"> - Explain how digital devices function - Identify input and output devices - Recognise how digital devices can change the way we work - Explain how a computer network can be used to share information - Explore how digital devices can be connected - Recognise the physical components of a network 	The Internet <ul style="list-style-type: none"> - Describe how networks physically connect to other networks - Recognise how networked devices make up the internet - Outline how websites can be shared via the World Wide Web (WWW) - Recognise how the content of the WWW is created - Evaluate the consequences of unreliable content 	Systems and searching <ul style="list-style-type: none"> - Explain the computers can be connected together to form systems - Recognise the role of computer systems - Experiment with search engines - Describe how search engines search results - Explain how results are ranked and why this is important 	Communication and collaboration <ul style="list-style-type: none"> - Explain the importance of internet addresses - Recognise how data is transferred across the internet - Explain how sharing information online can support people working together - Evaluate different ways of working online - Recognise how we communicate using technology - Evaluate different methods of online communication
Programming	Sequencing sounds <ul style="list-style-type: none"> - Explore a new programming environment - Identify that commands have an outcome - Explain that a program has a start - Recognise that a sequence of commands can have an order - Change the appearance of my project - Create a project from a task description 	Repetition in Shapes <ul style="list-style-type: none"> - Identify that accuracy in programming is important - Create a programme in a text-based language - Explain what 'repeat' means - Modify a count controlled loop - Decompose a task into small steps - Create a programme that uses loops 	Selection in Quizzes <ul style="list-style-type: none"> - Explain how selection is used in computing programs - Relate that conditional statement connects a condition to an outcome - Explain how selection directs the flow of a program - Design a programme which uses selection - Create a program with uses selection - Evaluate my program 	Variables in Games <ul style="list-style-type: none"> - Define a 'variable' (something changeable) - Explain why a variable is used in programming - Choose how to improve a game by using variables - Design a project that builds on a given example - Create a project - Evaluate my project
Creating media	Desktop publishing <ul style="list-style-type: none"> - Recognise how text and images convey information - Recognise that text and layout can be edited - Choose page settings - Add content to a desktop publishing publication - Use different layouts 		Introduction to Vector Graphics <ul style="list-style-type: none"> - Identify that drawing tools can be used to produce different outcomes - Create a vector drawing using shapes - Use tools to achieve a desired effect - Recognise that vector drawings consist of layers - Group objects to make them easier to work with 	Web-page Creation <ul style="list-style-type: none"> - Review an existing website - Plan and create the features of a web page - Consider ownership and use images (copyright) - Recognise the need to preview pages - Outline the need for a navigation path

				- Recognise the implications of linking to content owned by other people
Data and information	Branching databases <ul style="list-style-type: none"> - Create questions with yes/no answers - Identify the attributes needed to collect data about an object - Create a branching database - Explain why it is helpful for a database to be structured - Plan the structure of a branching database - Create an identification tool 	Data logging <ul style="list-style-type: none"> - Explain that data gathered over time can be used to answer questions - Use a digital device to collect data - Use a data logger - Recognise how a computer can help us analyse data - Identify data needed to answer questions - Use data from sensors 	Flat File Databases <ul style="list-style-type: none"> - Use a form to record information - Compare paper and computer based databases - Outline how you can answer questions by grouping and sorting data - Explain that tools can be used to select data - Explain that programs can be used to compare data 	Spreadsheets <ul style="list-style-type: none"> - Create a data set in a spreadsheet - Build a data set in a spreadsheet - Explain that formulas can be used to produce calculated data - Apply formulas to data - Create a suitable way to present data -