Computing End of Year Assessment

Year 1

To identify technology
To identify a computer and its main parts
To use a mouse in different ways
To use a keyboard to type on a computer
To use the keyboard to edit text
To create rules for using technology responsibly

To describe what different freehand tools do
To use the shape tool and line tool
To make careful choices when painting a digital picture
To explain why I used the tools I did
To use a computer on my own to paint a picture

To explain what a given command will do
To act out a given word
To combine forwards and backwards commands to make a sequence
To combine four direction commands to make sequences
To plan a simple program
To find more than one solution to a problem

To label objects
To identify that objects can be counted
To describe objects in different ways
To count objects with the same properties
To compare groups of objects
To answer questions about groups of objects

To use a computer to write
To add and remove text on a computer
To identify that the look of text can be changed on a computer
To make careful choices when changing text
To explain why I used the tools that I chose
To compare writing on a computer with writing on paper

To choose a command for a given purpose
To show that a series of commands can be joined together
To identify the effect of changing a value
To explain that each sprite has its own instructions
To design the parts of a project
To use my algorithm to create a program

Below Expectation	At Expectation	Above Expectation

Computing End of Year Assessment

Year 2

To recognise the uses and features of information technology
To identify information technology in the home
To identify information technology beyond school
To explain how information technology benefits us
To show how to use information technology safely
To recognise that choices are made when using information technology
To know what devices can be used to take photographs
To use a digital device to take a photograph
To describe what makes a good photograph
To decide how photographs can be improved
To use tools to change an image
To recognise that images can be changed
To describe a series of instructions as a sequence
To explain what happens when we change the order of instructions
To use logical reasoning to predict the outcome of a program (series of commands)
To explain that programming projects can have code and artwork
To design an algorithm
To create and debug a program that I have written
To recognise that we can count and compare objects using tally charts
To recognise that objects can be represented as pictures
To create a pictogram
To select objects by attribute and make comparisons
To recognise that people can be described by attributes
To explain that we can present information using a computer
To say how music can make us feel (not a computing related progression step)
To identify that there are patterns in music
To describe how music can be used in different ways
To show how music is made from a series of notes
To create music for a purpose
To review and refine our computer work
To explain that a sequence of commands has a start
To explain that a sequence of commands has an outcome
To create a program using a given design
To change a given design
To create a program using my own design

Below Expectation	At Expectation	Above Expectation

Computing End of Year Assessment

Year 3

To explain how digital devices function
To identify input and output devices
To recognise how digital devices can change the way we work
To explain how a computer network can be used to share information
To explore how digital devices can be connected
To recognise the physical components of a network

To explain that animation is a sequence of drawings or photographs
To relate animated movement with a sequence of images
To plan an animation
To identify the need to work consistently and carefully
To review and improve an animation
To evaluate the impact of adding other media to an animation

To explore a new programming environment
I can identify that each sprite is controlled by the commands I choose
To explain that a program has a start
To recognise that a sequence of commands can have an order
To change the appearance of my project
To create a project from a task description

To create questions with yes/no answers
To create a branching database
To explain why it is helpful for a database to be well structured
To identify objects using a branching database
To identify the object attributes needed to collect relevant data
To compare the information shown in a pictogram with a branching database

To recognise how text and images convey information
To recognise that text and layout can be edited
To choose appropriate page settings
To add content to a desktop publishing publication
To consider how different layouts can suit different purposes
To consider the benefits of desktop publishing

To explain how a sprite moves in an existing project
To create a program to move a sprite in four directions
To adapt a program to a new context
To develop my program by adding features
To identify and fix bugs in a program
To design and create a maze based (given) challenge

Below Expectation	At Expectation	Above Expectation

Computing End of Year Assessment

Year 4

To describe how networks physically connect to other networks
To recognise how networked devices make up the internet
To outline how websites can be shared via the World Wide Web
To describe how content can be added and accessed on the World Wide Web
To recognise how the content of the WWW is created by people
To evaluate the consequences of unreliable content
To identify that sound can be digitally recorded
To use a digital device to record sound
To explain that a digital recording is stored as a file
To explain that audio can be changed through editing
To show that different types of audio can be combined and played together
To evaluate editing choices made
To identify that accuracy in programming is important
To create a program in a text-based language
To explain what 'repeat' means
To modify a count-controlled loop to produce a given outcome
To decompose a program into parts
To create a program that uses count-controlled loops to produce a given outcome
To explain that data gathered over time can be used to answer questions
To use a digital device to collect data automatically
To explain that a data logger collects 'data points' from sensors over time
To use data collected over a long duration to find information
To identify the data needed to answer questions
To use collected data to answer questions
To explain that digital images can be changed
To change the composition of an image
To describe how images can be changed for different uses
To make good choices when selecting different tools
To recognise that not all images are real
To evaluate how changes can improve an image
To develop the use of count-controlled loops in a different programming environment
To explain that in programming there are infinite loops and count controlled loops
To develop a design which includes two or more loops which run at the same time
To modify an infinite loop in a given program
To design a project that includes repetition
To create a project that includes repetition

Below Expectation	At Expectation	Above Expectation

Computing End of Year Assessment

Year 5

To explain that computers can be connected together to form systems
To recognise the role of computer systems in our lives
To recognise how information is transferred over the internet
To explain how sharing information online lets people in different places work together
To contribute to a shared project online
To evaluate different ways of working together online

To recognise video as moving pictures, which can include audio
To identify digital devices that can record video
To capture video using a digital device
To recognise the features of an effective video
To identify that video can be improved through reshooting and editing
To consider the impact of the choices made when making and sharing a video

To control a simple circuit connected to a computer
To write a program that includes count-controlled loops
To explain that a loop can stop when a condition is met, e.g. number of times
To conclude that a loop can be used to repeatedly check whether a condition has been met
To design a physical project which includes selection
To create a controllable system which includes selection

To use a form to record information
To compare paper and computer-based databases
To apply my knowledge of a database to ask and answer real-world questions
To explain that tools can be used to select data to answer questions
To apply my knowledge of a database to ask and answer real-world questions
To apply my knowledge of a database to ask and answer real-world questions

To identify that drawing tools can be used to produce different outcomes
To create a vector drawing by combining shapes
To use tools to achieve a desired effect
To recognise that vector drawings consist of layers
To group objects to make them easier to work with
To evaluate my vector drawing

To explain how selection is used in computer programs
To relate that a conditional statement connects a condition to an outcome
To explain how selection directs the flow of a program
To design a program which uses selection
To create a program which uses selection
To evaluate my program

Below Expectation	At Expectation	Above Expectation

Computing End of Year Assessment

Year 6

To explain the importance of internet addresses
To explain how data is transferred across the internet
To explain how sharing information online can help people work together
To evaluate different ways of working together online
To recognise how we communicate using technology
To evaluate different methods of online communication
To review an existing website and consider its structure
To plan the features of a web page
To consider the ownership and use of images (copyright)
To recognise the need to preview pages
To outline the need for a navigation path
To recognise the implications of linking to content owned by other people

To define a 'variable' as something that is changeable
To explain why a variable is used in a program
To choose how to improve a game by using variables
To design a project that builds on a given example
To use my design to create a project
To evaluate my project
To create a data set in a spreadsheet
To build a data set in a spreadsheet
To explain that formulae should be used to produce calculated data
To apply formulae to data
To create a spreadsheet to plan an event
To choose suitable ways to present data

To recognise that you can work in 3D on a computer
To identify that digital 3d objects can be modified
To recognise that objects can be combined in a 3d model
To create a 3d model for a given purpose
To plan my own 3d model
To create a program to run on a controllable device
To explain that selection can control the flow of a program
To update the variable with a user input
To use a conditional statement to compare a variable to a value
To design a project that uses inputs and outputs on a controllable device
To develop a program to use inputs and outputs on a controllable device

Below Expectation	At Expectation	Above Expectation