

Computing			
FS2	<ul style="list-style-type: none"> Explore technology Repeat an action with technology to trigger a specific outcome Recognise the success or failure of an action Follow simple instructions to control a digital device Try alternative approaches to achieve a goal Understand that we control computers Can order the steps of a known task Input a short sequence of instructions to control a device 	<ul style="list-style-type: none"> Access content in a range of formats, e.g. image, video, audio Sort familiar objects into 1 or more categories Answer basic questions about information displayed in images, e.g. more or less Can distinguish between text, image, video and audio content Collect simple data (e.g. likes/dislikes) on a topic Can present simple data using images, e.g. number of animals 	<ul style="list-style-type: none"> Use technology to explore and access digital content Operate a digital device with support to fulfil a task Create simple digital content, e.g. digital art Choose media to convey information, e.g. image for a poster Choose a digital device from a selection to complete a specific task
	Year 1/2	Year 3/4	Year 5/6
Computational Thinking & Programming	<ul style="list-style-type: none"> Identify and list the steps of a known task in order Understand that we control computers by giving them instructions Create a simple program e.g. to control a floor robot Understand what an algorithm is Create a simple algorithm Predict the outcome of a simple algorithm or program Understand that the order of instructions in an algorithm is important Understand that computers have no intelligence and we have to program them to do things Debug an error in a simple algorithm or program e.g. for a floor robot Understand that instructions in an algorithm need to be clear and unambiguous Identify and correct errors in a given algorithm or program, and understand the term debugging Evaluate the success of an algorithm or program Use the language if... then to describe the relationship between two actions 	<ul style="list-style-type: none"> Remix and change an existing program Use repetition to make programs more efficient Predict the outcome of a more complex program, e.g. in Scratch or Logo Use forever loops in a program Understand that we can decompose a problem into smaller chunks to make it simpler Create a program using a range of events/inputs to control what happens Use selection in algorithms and programs, i.e. if... then... Decompose a problem and create a solution (sub-routine) for each step Use procedures in programs to create a sub-routine e.g. a procedure called 'square' in Logo 	<ul style="list-style-type: none"> Recognise that different solutions exist for the same problem Predict what will happen in a program or algorithm (i.e. change of output) when the input changes (e.g. sensor, data or event) Use two-way selection, i.e. if... then... else... 4 Recognise variables in a program Create programs including repeat until loops Create simple variables, e.g. to keep score or remove lives in a game Understand the difference between and use if... then... and if... then... else... statements effectively Combine a variable with relational operators ($q = G$) to determine when a program changes, e.g. if score $G \geq 5$, say "well done" Can design a physical computing system that uses sensors, e.g. using a flow chart
Understanding & Sharing Data	<ul style="list-style-type: none"> Identify an object by asking yes/no questions Recognise charts, tables or branching databases and understand why we use them Explain information shown in a simple chart, pictogram, infographic or database Use specific software to create simple charts Collect data on a topic (eye colour, pets etc.) Present data in a pictogram independently Identify an object using a branching database Recognise an error in a branching database. Create a branching database using pre-prepared images and questions Find out similar information in different formats, e.g. text, video, audio Explain how different formats communicate information and their benefits Independently plan out and create a branching database Evaluate a given branching database and suggest improvements Understand that the questions you ask are important, when collecting data 	<ul style="list-style-type: none"> Appreciate that different programs work with different types of data, e.g. text, number Explore a record database to find out information Know that there is a difference between data and information Use filters in a database to find out specific information Understand the benefits of using a computer to create charts and databases Understand that information can be stored and shared on the Internet Understand that search engines store information in databases Design a questionnaire and collect a range of data on a theme Enter data into a database package and test Draw conclusions from information stored in a database, table or chart Understand that the Internet is made up of computers from all around the world connected together Understand that that school computers are connected together in a network Understand that we use a web browser to access information stored on the Internet Present data in a number of different ways to convey information 	<ul style="list-style-type: none"> Appreciate that different programs work with different types of data, e.g. text, number Explore a record database to find out information Know that there is a difference between data and information Use filters in a database to find out specific information Understand the benefits of using a computer to create charts and databases Understand that information can be stored and shared on the Internet Understand that search engines store information in databases Design a questionnaire and collect a range of data on a theme Enter data into a database package and test Draw conclusions from information stored in a database, table or chart
Communicating: Text, Images & Multimedia	<ul style="list-style-type: none"> Select media (e.g. images, video, sound) to present information on a topic Understand that you can edit and change digital content Select basic options to change the appearance of digital content Combine media with support to present information, e.g. text and images Apply edits to digital content to achieve a particular effect Plan out digital content Present ideas and information by combining media independently Talk about what makes digital content good or bad Edit digital content to improve it 	<ul style="list-style-type: none"> Edit existing media to make new content with an awareness of copyright Evaluate existing and their own digital content Edit digital content to improve it according to feedback Design and create digital content for a specific purpose Collaborate with peers using online tools, e.g. blogs, Google Drive, Office 365 Collect, organise and present information effectively using a range of media Use a range of tools to edit and enhance media for a particular effect 	<ul style="list-style-type: none"> Identify and use appropriate hardware and software to fulfil a specific task Remix and edit a range of existing and their own media to create content Recognise the audience when designing and creating digital content Understand the benefits of using technology to collaborate with others Are aware of a range of Internet services, e.g. email, VOIP (Voice Over Internet Protocol e.g. Skype, FaceTime), World Wide Web, and what they do Select, combine and use Internet services to fulfil a purpose Identify success criteria for creating digital content for a given purpose and audience Evaluate their own content against success criteria and make improvements accordingly