Y4 computing overview 2019-20: We are co-authors, We are software developers, We are musicians

Computing Activity	Desired Skills	Approaches to Developing Skills	Desired Knowledge and Understanding	Approaches to Developing Knowledge and Understanding	Curricula Materials	Assessed through (T1 T2 T3) Safe online presence Problem-solving Communicating Creating Evaluating		
						Most children will be able to... (working at)	Some children will not yet be able to...(working towards)	Some children are confidently able to... (exceeding)
Algorithms and Programs	• Use sequence in programs • Use selection in programs • Work with various forms of input and output • Use repetition in programs • Work with variables • Use logical reasoning to explain how some simple algorithms work • Use sequence, selection, and repetition in programs	• Class/group tuition with technical guidance from the Switched On computing program	• Understand how to use different programs and make or edit algorithms • Understand and explore databases and their uses for modern society • Understand how to use the internet and programs safely • Understand how to approach a problem and find a solution • Understand how to communicate effectively and safely with technology	• Class teacher showing children existing examples • Group work on creating and developing their own work	**TERM1:** **Unit 4a We are co-authors** • understand the conventions for collaborative online work, particularly in wikis • be aware of their responsibilities when editing other people's work • become familiar with Wikipedia, including potential problems associated with its use • practise research skills • write for a target audience using a wiki tool • develop collaboration skills • develop proofreading skills			
Databases	• Create and edit content on Wiki • Use internet services to create content that presents information • Use internet services to create and evaluate content that presents information • Design and create content	• Class/group tuition with reference to existing databases						
Using the internet	• Use search technologies effectively • Be discerning in evaluating digital content • Be discerning in evaluating digital content	• Class/group internet browsing, followed by reflective discussion		• Class teacher talk through programs and algorithms with opportunities to try different programs • Observing algorithms and debugging them	**TERM2:** **Unit 4b We are software developers** • develop an educational computer game using • selection and repetition • understand and use variables • start to debug computer programs • recognise the importance of user interface design, including consideration of input and output.			
Problem solving	• Solve problems by decomposing them into smaller parts • Design programs that accomplish specific goals • Write programs that accomplish specific goals • Debug programs that accomplish specific goals • Use logical reasoning to detect and correct errors in algorithms and programs	• Class, then group opportunities for problem solving						
Communicating	• Understand the opportunities networks offer for communication and collaboration • Use a variety of software (including internet services) to present information	• Observational opportunities to work as part of a group		• Teacher led creating and editing • Observing pre-existing master pieces and masters in the field	**TERM3:** **Unit 4c We are musicians** • use one or more programs to edit music • create and develop a musical composition, refining their ideas through reflection and discussion • develop collaboration skills • develop an awareness of how their composition can enhance work in other media. RE ART DAY WHOLE SCHOOL: Worship: Music instrument			
SMSC	• Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour • To know how to seek help – where to go, and how to set privacy settings • Recognise acceptable/ unacceptable behaviour • Knowing how to find out about website or game policies	• Teacher guidance on safe internet use and introduction to supportive websites (NSPCC)						