

YEAR 2

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Programming B – Introduction to quizzes	<p>The three Prime ELGS of Communication and Language, PSED and Physical Development provide the foundations of which all other learning is built upon.</p> <p>No Specific ELG links.</p>	To be introduced to on-screen programming. To explore sprites and backgrounds, using programming blocks to use, modify and create programs. To be introduced to program design through algorithms.	To understand that sequences of commands have an outcome. To use and modify designs to create and evaluate a project.	To explore the links between events and actions. To move sprites in four directions. To introduce programming extensions, changing the size and colour. To design and code their own program.	To explore the concept of repetition in programming. To look at similarities and differences between count controlled and infinite loops. To modify, design and create a game using repetition, applying stages of programming design throughout.	To develop knowledge of selection by revisiting how conditions can be used in programming. To create algorithms and programs using this understanding. To design, write and evaluate a quiz program.	To use the four programming constructs (sequence, repetition, selection and variables) whilst using a physical device. To design, build and test a simple program and transfer to device.

COMPOSITES

Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Create and debug simple programs

Use logical reasoning to predict the behaviour of simple programs

COMPONENTS

	1	2	3	4	5	6	End Point
	Can I explain that a sequence of commands has a start?	Can I explain that a sequence of commands has an outcome?	Can I create a program using a given design?	Do I know how to change a given design?	Can I create a program using my own design?	How could my project be improved?	This unit progresses children's knowledge and understanding of instructions in sequences and the use of logical reasoning to predict outcomes.
CONCEPTS Link to concept map	Programming Computer Science	Programming Computer Science	Programming Computer Science	Programming Computer Science	Programming Computer Science	Programming Computer Science	
SKILLS	Identify the start of a sequence Show how to run my program	Predict the outcome of a sequence of commands	Work out the actions of a sprite in an algorithm	Choose backgrounds for the design	Choose the images for my own design Create an algorithm	Compare my project to my design	This unit initially recaps on learning from the Year 1 ScratchJr unit 'Programming B – Programming animations'. Children begin to understand that sequences

		Match two sequences with the same outcome Change the outcome of a sequence of commands	Decide which blocks to use to meet the design Build the sequences of blocks I need	Choose characters for the design Create a program based on the new design	Build sequences of blocks to match my design	Improve my project by adding features Debug	of commands have an outcome, and make predictions based on their learning. They use and modify designs to create their own quiz questions in ScratchJr, and realise these designs in ScratchJr using blocks of code. Finally, children evaluate their work and make improvements to their programming projects.
KNOWLEDGE	Identify that a program needs to be started	To know what a code is and how to run the code	To know how to design and code a project	To know how to design and code a project	To know how to design and code a project To know what an algorithm is To know what artwork is	To know what a code is and how to run the code	Children understand the different levels of how to create a program: Task – what is needed Design – what it should do Code – how it is done Running the code – what it does
LESSON LINK	Intro to quizzes	Intro to quizzes	Intro to quizzes	Intro to quizzes	Intro to quizzes	Intro to quizzes	
PROGRESSIVE VOCABULARY	sequence command program run start	sequence command outcome predict program blocks	sprite algorithm blocks design sequence predict	actions sprite project blocks design sequence modify change	design algorithm build sequence blocks match	compare design debug program, features evaluate	Children will be able to understand, use and articulate the vocabulary
CURRICULUM EXPERIENCES					Create a digital quiz		
END POINT	Children will recap what they know already about the ScratchJr app. They will begin to identify the start of	Children will discover that a sequence of commands has an 'outcome'. They will predict the	Children will be taught how to use the Start on tap and Go to page (change background)	Children will look at an existing quiz design and think about how this can be realised within	Children will create their own quiz question designs including their own choices of question,	Children will compare their projects to their designs. They will think about how they could	

	<p>sequences in real-world scenarios, and learn that sequences need to be started in ScratchJr. Children will create programs and run them in full-screen mode using the Green flag.</p>	<p>outcomes of real-life scenarios and a range of small programs in ScratchJr. Children will then match programs that produce the same outcome when run, and use a set of blocks to create programs that produce different outcomes when run.</p>	<p>blocks. They will use a predefined design to create an animation based on the seasons. Children will then be introduced to the task for the next lesson. They will predict what a given algorithm might mean.</p>	<p>the ScratchJr app. They will choose backgrounds and characters for their own quiz projects. Children will modify a given design sheet and create their own quiz questions in ScratchJr.</p>	<p>artwork, and algorithms. They will increase the number of blocks used within their sequences to create more complex programs.</p>	<p>improve their designs by adding additional features. They will modify their designs and implement the changes on their devices. Children will find and correct errors in programs (debug) and discuss whether they debugged errors in their own projects.</p>	
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