


Learning journey	Computing – computer science	Walker one	Year 6	
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Building on prior learning	Theme overview	Preparing for future learning	Vocabulary
In the previous Y6 unit, the children have been learning about variables and procedures. They have looked at what these terms mean and have modified pre-created code in order to be able to draw various shapes using variables and create a new block within the programme.	In this unit, the children will be learning to apply their knowledge of variables that they have looked at in the previous unit to a game. They will be using their knowledge from all years to make modifications to speed by changing the variables of a pre-programmed code and using this as a scaffold to introduce new written code into their game.	In KS3, the children will develop their knowledge of programming and use the knowledge that has been taught throughout KS2 to know how systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils will become equipped to use algorithms and code to create programs, systems and a range of content.	Code Programming Input Output Selection block Algorithm Procedure Predicting Running Investigating Modifying Creating

NC coverage and HWJS skills development	Knowledge organisers
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<p><u>National curriculum coverage</u></p> <p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p><u>HWJS skills development</u></p> <p>Be able to repurpose ideas for a chosen purpose. Create multiple non-connected variables in code. De-bug repetition, selection and variable errors independently.</p>	<p>I can apply knowledge of variables into a game.</p> <p>I can predict what complicated code will do from a multiple choice list.</p> <p>I can create another element to the game (or modify pre-prepared code) by building on what has already been programmed and using this as a scaffold.</p>	
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Evaluate more complex code that does the same thing and be able to adjust the code accordingly.			
<u>Connections / deepening understanding</u> How is the understanding of this area deepened in other areas of the curriculum? What links are there in the other subjects in the curriculum?	<u>RADE</u> Are the rights of the child relevant in this area of study - do they get referred to in the work?	<u>Assessment</u> By the end of the unit the children will be able to ... Details of the objectives that they will have covered within this unit of work	
English – problem solving and communication with a partner. PSHE – SMSC values and critical thinking skills.	Collaboration Teamwork Critical thinking skills	The pupils will be assessed through ongoing assessment through teacher observation and pieces of work produced throughout the sessions. By the end of the unit the children will be able to make modifications to code to create a new element of a game.	
Assessment recording for the unit - checking the level of pitch of the work			
<u>Key skill(s)/ knowledge to be assessed by the end of the unit</u>	<u>Lower attaining</u>	<u>Middle attaining</u>	<u>Higher attaining</u>
I can create another element to the game by building on what has already been programmed.	I can make a small change to code to change the speed of the game.	I can modify written code to change the game.	I can use written code as an example to create my own code for another element of the game.
I can re-purpose an idea and evaluate my choices.	I can use an idea already prepared and change one small element.	I can use an example and use this as a scaffold to create my own element of the game.	I can use previously written code as an example to inform my own planning to create a new element of the game, coding independently.