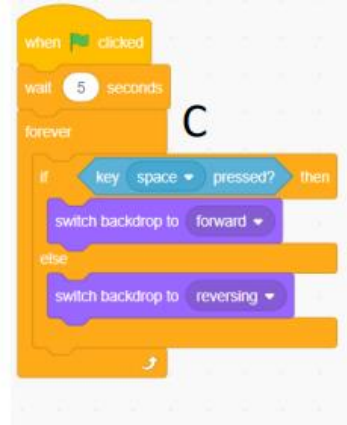


Learning journey	Computing – computer science	Cheese Crush	Year 5	
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Building on prior learning	Theme overview	Preparing for future learning	Vocabulary
The children have been learning to use an 'if, else' block. They looked at controlling what they sprite does when an answer given is not correct and allow their sprite to react to an incorrect answer rather than just moving on to the next question.	In this unit, the children will use their knowledge of loops and selection blocks to be introduced to condition-switches-between-actions within a loop. They will learn why these loops are necessary for gaming and controlling sprites for a moving game (cheese crush).	In the next unit in Y6, the children will be introduced to the variables and procedures blocks. They will learn what these terms mean and modify pre-created code in order to be able to draw various shapes using variables and create a new block within the programme.	Control blocks 'Wait' Sprite Code Programming Input Output Selection block Algorithm Condition-switches-between-actions

NC coverage and HWJS skills development	Knowledge organisers	
<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>Read, follow and write algorithms with selection and repetition.</p> <p>Adapt a given design for a new purpose.</p>	<p>I know what condition-switches-between- action means.</p> <p>I can describe and modify programme keys to move the sprite in a moving game using loops and selection blocks.</p> <p>I can modify the timing of two sprites which have different roles within the game.</p>	

Observe a working programme and decompose its elements.			
<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	<p>The pupils will be assessed through ongoing assessment through teacher observation and pieces of work produced throughout the sessions.</p> <p>By the end of the unit the children will be able to use loops and condition selection blocks in a piece of written code.</p>	
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 use a forever loop and selection blocks within one piece of code.	I can make a small change to code already written with forever loops and selection blocks.	I can modify written code, explaining how the choices will modify the game.	I can use written code as an example to create my own code for a game using loops and selection blocks, explaining why this is important.
I know how to adapt a given design for a new purpose.	I can modify a simple code, already prepared, for a game.	I can heavily modify a code for two or more sprites in the game, using modelled examples.	I can design, write and modify my own written code for multiple sprites to create a game, similar to the model shown.