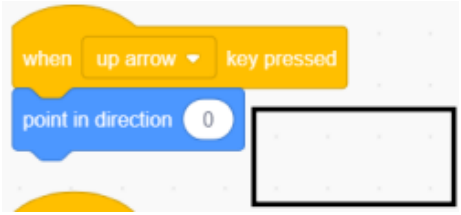
Learning journey	Computing – computer science	Ladybug munch	Year 4	

Building on prior learning	Theme overview	Preparing for future learning	Vocabulary
At the end of year 3, children looked at how to add sound coding blocks to their simple sequences. They have acquired knowledge of simple sequences and can create these, including the use of sound blocks. They learnt how to import a sound and increase and decrease the length of time a note plays for.	In this unit, the children will learn how to incorporate learn skills in year 3 by coding a sprite to move in different directions. Children will learn to programme objects to 'wait' to disappear until the sprite on the screen touches them.	The children will apply their skills from year 3 and learning how to 'wait' to start to understand how count-controlled loops work. The 'repeat' block will be introduced into new learning.	Input/output Sequence Sprite Objects Simple sequence

NC coverage and HWJS skills development	Knowledge organisers
National curriculum coverage Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs **HWJS skills development** Write simple sequence algorithms using words. Create sequences of multiple sequences where timing is critical. Observe a working program and decompose its elements as a class. Debug simple sequence errors independently	I can identify an everyday output in everyday life and in code. I understand which blocks are used programme a character to move around the screen using the space bar and arrows to change its direction. I can programme objects to 'wait' to disappear until the character touches them. I can change a costume I can debug a multi-step sequence.



Connections / deepening understanding How is the understanding of this area deepened in other areas of the curriculum? What inks are there in the other subjets in the curriculum?	**RADE** Are the rights of the child relevant in this area of study - do they get referred to in the work?	**Assessment** 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	**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** use the 'wait' function effectively so objects disappear when they are touched by the sprite.

Assessment recording for the unit - checking the level of pitch of the work			
Key skill(s)/ knowledge to be assessed by the end of the unit	**Lower attaining**	**Middle attaining**	**Higher attaining**
I can create sequences of multiple sequences where timing is critical	Pupils understand which block must be used to pause the code until the sprite touches the object	Pupils can use the 'wait until' function so the items do not disappear until they are touched.	Pupils can use the 'wait until' function in code in multiple sequences and include a sound when the items disappear.
I know and can use the correct blocks to programme a sprite to move around the screen	Pupils can identify the blocks needed to move a sprite around the screen and will begin to use them, with support from an adult	Pupils can identify the blocks required and be able to construct a simple code to move a sprite.	Pupils can identify the blocks required and be able to independently construct multiple simple codes to move a sprite around the screen.