Learning journey	Computing	Magic carpet	Year 3	

Building on prior learning	Theme overview	Preparing for future learning	Vocabulary
In key stage 1, the children learn about what algorithms are, how they are implemented as programs on digital devices and that programs run by following precise and unambiguous instructions. Before the start of the unit they will be able to predict behaviour of simple programs and can describe what an algorithm does.	In this unit, children will understand what a sprite is using the software 'scratch' and how to move it. They will explore a working programme to see how simple sequences are constructed, using this as a scaffold to build one simple sequence for one sprite to move their own magic carpet.	In the next unit of learning during year 3, children will be taught how to add another sprite to their project. They will learn the importance of timing when creating 2 simple sequences. They will learn how to ask the sprite to wait and programme it to wait a varying number of seconds to create a conversation.	Scratch Sprite Debug Direction Movement Start flag Blocks Event blocks (dark orange) Motion blocks (blue blocks) Mouse Keyboard Degrees

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 **HWJS skills development** Start to read and follow simple everyday written sequences, identifying what an algorithm wants you to do. Observe a working program and decompose its elements as a class.	I know what a sprite is and how to move it. I can decompose a coded programme and know different coloured blocks control different aspects of the programme. I can create a simple sequence. I know how to debug simple code.

Create sequence of simple code that can be easily read. Develop understanding of how to create multiple sequences that run concurrently	

Connections / deepening understanding	**RADE**	**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
	Collaboration Deeper thinking	**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** move a sprite using a simple sequence.

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 describe what a piece of code stands f0r.	Identify motion blocks and describe to an adult what they do	Describe to a peer what will happen to a sprite when given a piece of code to read.	Explain to a peer what will happen to a sprite when given multiple pieces of code to read.
I can create a sequence of simple code that moves a sprite.	Create a code that moves a sprite from one point to another	Create a simple code that moves a sprite to multiple points	Create multiple sequences that run concurrently