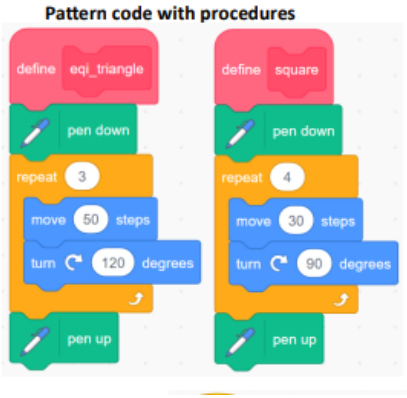
Learning journey	Computing – computer science	Basic procedures	Year 6	

Building on prior learning	Theme overview	Preparing for future learning	Vocabulary
The children have been learning to use their knowledge of loops and selection blocks to be introduced to condition-switches-between-actions within a loop. They looked at why these loops are necessary for gaming and controlling sprites for a moving game. They applied their knowledge to modify code in a game already created.	In this unit, 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.	In the next unit, the children will be learning to apply their knowledge of variables that they have looked at during this 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.	Code Programming Input Output Selection block Algorithm Procedure Predicting Running Investigating Modifying Creating

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** Be able to repurpose ideas for a chosen purpose. Create multiple non-connected variables in code. De-bug repetition, selection and variable errors independently.	I can define what a procedure and a variable is. I can modify pre-created code to investigate how changing the code effects the outcome. I can use the variables blocks to draw a shape. I can create a new block.



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 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 use variable blocks to draw shapes.

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 use the variable block to draw a shape.	I can make a small change to code already written to draw a shape using variables.	I can modify written code, explaining how the choices will allow to draw a shape.	I can use written code as an example to create my own code for drawing multiple shapes using variables.
I can de-bug repetition, selection and variable errors independently.	I can modify a simple code, already prepared, to draw my shapes.	I can de-bug any modified code by looking at the scaffolded example to support my understanding.	I can de-bug my own code independently, using previous taught knowledge and trying out.