Year 4 Computer Science
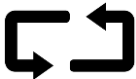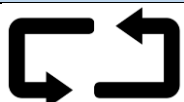
- Write code that uses a timer to create a sequence of traffic lights turning on and off.
- Write a computer program where different pieces of code execute in a particular sequence.
- Write code that uses a timer to create a sequence of events.
- Create a program that uses sequences for two different objects moving on the screen.

Introduction to variables outcome: create simple programs using variables

Sequence	Working Towards	Within	Expected	Above
Use variables to keep track of the score in a game that uses conditional events.				
Use a variable to keep track of the score in a game where the score increases, decreases or resets when different conditions are met.				
Learn how to use multiple different variables and to set the value of a variable.				
Logical reasoning	Working Towards	Within	Expected	Above
Understand how a variable can be used to keep track of the score in a game.				

Repetition and loops outcome: when coding, use repetition and loops

Debug	Working Towards	Within	Expected	Above
Write the code to program a rocket to orbit round the spinning Moon, using the concepts of loops, regular or infinite repetition, and 'if statement' blocks.				
Write code that uses nested loops to create a car-driving program.				
Sequence	Working Towards	Within	Expected	Above
Use loops, a variable and if statements to create an animated scene of hot air balloons performing a repeating pattern in the sky.				
Use a loop to do something repeatedly in a program.				
Designs simple algorithms using loops and selection, i.e. if statements. (AL)				

Highlight: _____
_____

Glossary

Vocabulary	Word class	Definition
animated	verb	give (a film or character) the appearance of movement using animation techniques.
complex	adjective	consisting of many different and connected parts.
concepts	noun	a plan or intention.
efficient	adjective	achieving maximum productivity with minimum wasted effort or expense.
rotation	noun	the action of rotating about an axis or centre.
specify	verb	identify clearly and definitely.
system	noun	a set of things working together as parts of a mechanism or an interconnecting network; a complex whole.
value	noun	the regard that something is held to deserve; the importance, worth, or usefulness of something.
variable	adjective	not consistent or having a fixed pattern; liable to change.