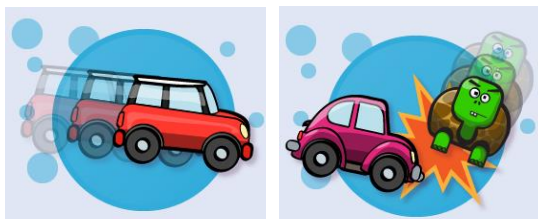

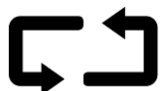



Prior Knowledge


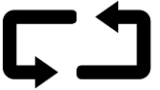

- Use variables to keep track of the score in a game that uses conditional events.
- Learn how to use multiple different variables and to set the value of a variable.
- Write the code to program a rocket to orbit round the spinning moon, using the concepts of loops, regular or infinite repetition, and 'if statement' blocks.
- Use a loop to do something repeatedly in a program.



Speed direction and coordinates outcome: use numbers to represent actions

Debug		Working Towards	Within	Expected	Above
	<ul style="list-style-type: none"> Write code including if statements to make an object rotate, and combine this with conditional events to make a game. 				
Sequence		Working Towards	Within	Expected	Above
	<ul style="list-style-type: none"> Use object properties (speed, heading and angle) to create a driving simulation. 				
	<ul style="list-style-type: none"> Create a sailing game where a boat's position on the screen is controlled by making changes to its co-ordinates. 				
	<ul style="list-style-type: none"> Set friction to affect the speed and movement of a car in a driving simulation. 				
Logical reasoning		Working Towards	Within	Expected	Above
	<ul style="list-style-type: none"> Understand that setting values in code controls the speed of an object. 				

Random numbers and simulations outcome: create inputs to generate random numbers

Debug		Working Towards	Within	Expected	Above
	<ul style="list-style-type: none"> Write code for a game that uses random numbers to move objects in different direction. 				
	<ul style="list-style-type: none"> Write code that uses random numbers to move objects at random speeds and headings, and use this to create a game. 				
Sequence		Working Towards	Within	Expected	Above
	<ul style="list-style-type: none"> Create a ping-pong game, using random headings in specific ranges. 				
	<ul style="list-style-type: none"> To be able to generate and display random numbers, and use these within the program for a car racing game. 				
Logical reasoning		Working Towards	Within	Expected	Above
	<ul style="list-style-type: none"> Understand how numbers in combination with variables and conditional hit events to create a realistic pinball game. 				

Highlights: _____



Glossary

Vocabulary	Word class	Definition
accelerate	verb	begin to move more quickly
control	verb	determine the behaviour or supervise the running of
coordinates	verb	bring the different elements of (a complex activity or organization) into a harmonious or efficient relationship
decelerate	verb	reduce or cause to reduce in speed.
determine	verb	cause (something) to occur in a particular way or to have a particular nature
friction	noun	the resistance that one surface or object encounters when moving over another
generate	verb	produce or create.
precise	adjective	marked by exactness and accuracy of expression or detail.



Animate, animation, project, remix, repeat, iteration, debug, broadcast, receive, sequence, show, hide, visible, invisible, deconstruct, transition, audio, record, interactive, user