

Year 6 Computer Science

Prior Knowledge

- Write code including if statements to make an object rotate, and combine this with conditional events to make a game.
- Ø Use object properties (speed, heading and angle) to create a driving simulation.
- Oreate a sailing game where a boat's position on the screen is controlled by making changes to its co-ordinates.
- \emptyset Set friction to affect the speed and movement of a car in a driving simulation.
- Ounderstand that setting values in code controls the speed of an object





More complex variables outcome: manipulate inputs to create useful outputs							
	Working Towards	Within	Expected	Above			
	Write code that prompts the user to input the value of a variable, and use this to create an interactive block chart.						
	To write the code for a shopping till using variables to store and calculate values.						
Sequence			Within	Expected	Above		
L J	Create a stopwatch with stop, start, and reset buttons, and both digital and analogue displays.						
Logical reasoning			Within	Expected	Above		
Ð	Use my knowledge of variables to make a balloon pop game that gets harder as users score more points.						

	Debug	Working Towards	Within	Expected	Above
	 Write code that detects the properties of an object and passes the value of these properties (or a set of parameters) to other objects, and to use this to create a space game. Make a game that moves objects around by getting information from events and passing object properties. 				
Sequence			Within	Expected	Above
	Create a golf game by writing code that accesses and uses object properties, including passing the value of these properties to other objects (passing a set of parameters).				
	Create a game where players stop objects moving by changing their properties.				
	Make a football game that passes the speed and heading of the pointer's movement to a ball on the screen.				
Logical reasoning			Within	Expected	Above
\mathcal{F}	Learn how to pass properties from one object to a second in order to make the second object move relative to the first.				



Glossary

Vocabulary	Word class	Definition
algorithm	noun	a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.
background	noun	the part of a picture, scene, or design that forms a setting for the main figures or objects, or appears furthest from the viewer
conditional	adjective	subject to one or more conditions or requirements being met
consequence	noun	a result or effect
penalty	noun	a handicap imposed on a player or team for breaking of rules
property	noun a thing or things belonging to someone	
simulation	nulation noun imitation of a situation or process.	

