

## 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		
<b>L</b> 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
	<ul> <li>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.</li> <li>Make a game that moves objects around by getting information from events and passing object properties.</li> </ul>				
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.	

