Year 6
Variables in Games

Key vocabulary

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Code	The sentences of computer 'language' that we write an algorithm in - how we instruct computers
Events	When something happens that can be checked within a piece of code - how computers 'sense'
Variable	Usually a number which can change in a piece of code
Count-controlled	An instruction that repeats a number of times
Repeat	To do the same action again
Loop	A section of code that repeats
Sprite	Graphical representation of an element within a game
Condition	A state or rule that the computer checks to see if it is true (happening) or false (not happening)

Apps/Software

Variables

Select 'Variables' (dark orange circle) from the menu on the left. Either choose from the available variables or 'Make A Variable.'
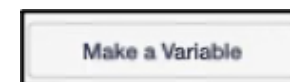
Select 'Events' (light orange circle) from the menu on the left. Choose what needs to happen for the variable to change. E.g. 'When this sprite clicked' or 'when space key pressed.'
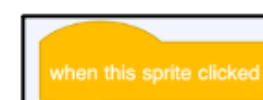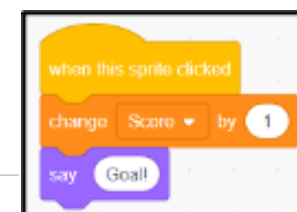
Select 'Variables' again from the menu on the left. Choose what will happen when the event happens, e.g. 'change score by 1' (to add a point) or 'change score by -1' to remove a point.
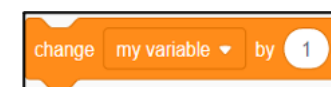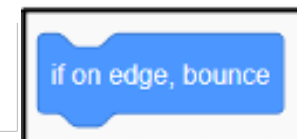
Adding more complex variables in Scratch

Adding Callouts: Select 'Looks' from the menu on the left. Add it to the variable program. Edit the text to change the callout.

Adding Motion: Many games require sprites to change position. This is achieved using the 'Motion' commands. Select 'Motion' from the menu on the left. Choose from the available motion commands.

Adding Sound: Many games require sounds to be added. This is achieved using the 'Sound' commands. Select 'Sounds' from the menu on the left. Choose from the available sound commands.