



Program: Scratch martin@wandsworthclc.com



Learning Objectives:
I can use a variable in my program.

Skills:
Use 'make a variable'

Coding Revision (Analysis): Get the children to analyse an if conditional piece of code. See Lesson 5 resources Folder.

Lesson: After children have booted up 'Scratch' and created their reset code. Get the children to load up their projects from last lesson or alternatively load the prepared code. Explain that they are going to add a score to the game using something known as a variable. Get the children to role play how a variable works. Have a box and some counters. Explain the box is the variable and that it can be called anything we want. In this example we are going to call it SCORE. Bring up one child ,child1, and explain that this child is the computer program and all he is going to do is write on the board what the value of the variable score is when asked. Bring up another child ,child2, and explain this child is another piece of computer code that changes the variable score when something happens in the program. Explain that in their game one sprite has caught the other so child2 needs to change the score by putting a counter in the SCORE variable. Now child 1 needs to see what the value of SCORE is and write it on the board. Repeat for a few more scores. Show how to create a variable give it a name(score) and then display it on the screen in their game. Show the different instructions that can be used with the new variable when it is created and explain that it can be used by 1 sprite or all. Get the children to adapt the chasing sprite game so that when one sprite catches the other it says got you and the score changes.

Challenge:

See if the children can add an if conditional that stops the game at a certain score (they will need to use the = operator in the green operators coding block) and then restarts the game. See demo in lesson resources.

Plenary: Can the children think of other uses of a variable? How might you use the variable SCORE to stop the game? What other instructions could we use to stop the game when it reaches a certain score?

Assessment opportunities:
Can the children write code that uses the variable correctly?