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 a piece of code that changes a variable called bounce every time the sprite hits the sides of the stage. See lesson 6 resources folder.

Lesson: After children have booted up 'Scratch' and created their reset code. Get the children to write a quick piece of code that draws a square. Show a square spiral on the board (see resources folder). Ask the children if they can work out the instructions to create this shape. Show them the spiral with the length of the sides written in (each side reducing by 2), see if they can spot the pattern. Ask if they can think of what variable we might choose and how can we write code using it to create this spiral? Let the children experiment trying to create a spiral square. Remind them that although we need to give instructions to a sprite to do the drawing we don't have to see the sprite. How might we do this? If successful get the children to save there work with a suitable name and then show them the code for drawing a spiral square (see lesson resources). Talk through each step of the instructions. See if they can then work out how to make a spiral triangle. Completed code is in lesson resources folder, for an example.

Challenge:

Get the children to use the 'make a variable instruction to create some other spiral patterns in different colours and pen sizes. Save the work.

Plenary: Can the children think how we might use these drawing codes in a video game? (Create a maze background)

Assessment opportunities:
Can the children adapt code for a different purpose.