ScRATCH **I am an ammonite**

Register/login at https://scratch.mit.edu
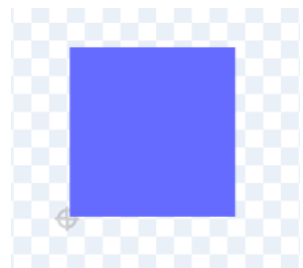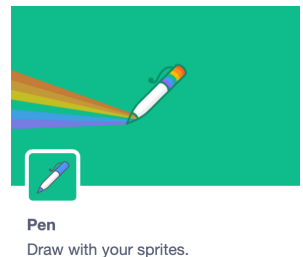Remember to write down your password.

*In this project we look at the **Pen extension**. This allows a sprite to stamp images of itself.*

1) Click on the **Add Extension** button at the bottom left of the screen.

2) Select the **Pen** extension. New **Pen** code blocks appear below the other code blocks.

Pen
Draw with your sprites.

3) Add a new sprite costume to the cat using **Paint**. Make a square about 10 small checks on each side. Use the select tool to move it so the **centre is at the bottom left**.

This square is a segment of an ammonite.
*The centre is a **hinge** when we rotate it.*

4) Add a **When FLAG clicked** code block, to run the program.

5) Start off with a new block in 'Pen', **erase all** to clear the screen.

The ammonite spirals around itself, and the angle between segments goes down as we move outwards.

6) Create an **angle** variable, then add a block to set the angle to 70 degrees.
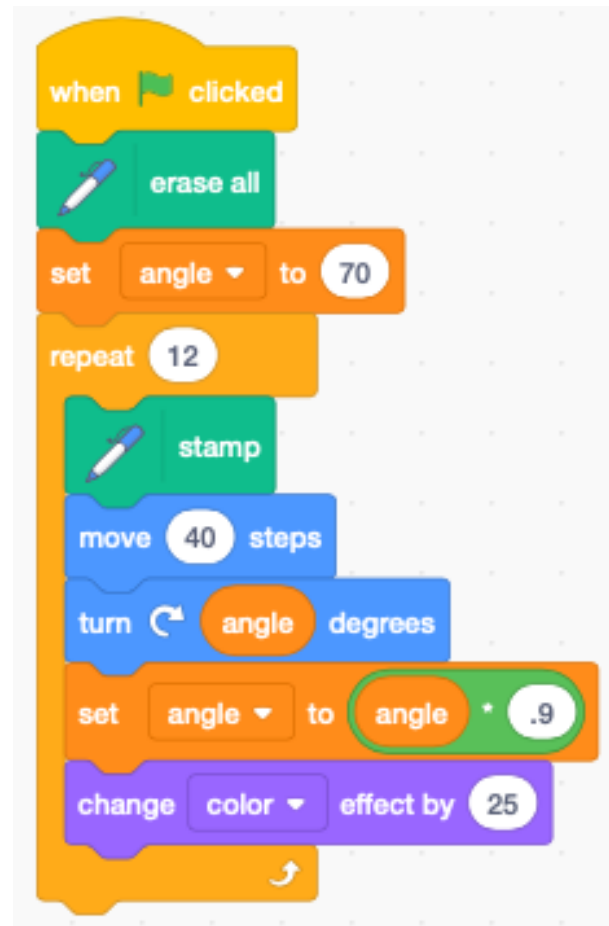7) A loop controls how many segments to stamp.
   I added **repeat 12**.
8) **Stamp** the segment in the loop
9) **Move** the segment and **turn** it through angle degrees.
10) The angle gets a bit smaller each time we go round the loop. We *scale* the angle down by multiplying it by a number between 0 and 1.
   Set angle to angle * 0.9
11) Change the colour of the segment each time you go round the loop with **change colour effect**

*Remember to **Save** your code with a good name.*
File > Save now