# Scratch logo and symbol, meaning, history, PNG

**I am an ammonite**

Register/login at <https://scratch.mit.edu>

Remember to write down your password.

Icon

Description automatically generated*The* ***Pen extension*** *lets a sprite stamp copies of itself.*

1. Graphical user interface

   Description automatically generated with medium confidenceClick 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.
3. **Shape, square

   Description automatically generated**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 acts as a* ***hinge*** *when we rotate it.*

1. Diagram

   Description automatically generatedAdd a **when** **green flag** **is** **clicked** code block, to run the program.
2. 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.*

1. Graphical user interface, chart

   Description automatically generated with medium confidenceCreate an **angle** variable, then add a block to set the angle to 70 degrees.
2. A loop controls how many segments to stamp.   
   For example, **repeat 12**.
3. **Stamp** the segment in the loop
4. **Move** the segment and **turn** it through **angle** degrees.
5. **Shape

   Description automatically generated**Make the angle get a bit smaller each time round the loop. Reduce the angle by multiplying it by a number between 0 and 1:   
   **set angle to angle \* 0.9**
6. Change the colour of the segment each time you go round the loop with a **change colour effect**

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