# 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*In this project we look at the* ***Pen extension****. This allows a sprite to stamp images 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 is a* ***hinge*** *when we rotate it.*

1. Diagram

   Description automatically generatedAdd a **When** **FLAG** **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.   
   I added **repeat 12**.
3. **Stamp** the segment in the loop
4. **Move** the segment and **turn** it through angle degrees.
5. **Shape

   Description automatically generated**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**
6. 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***