

## Project #1: Using Extensions

1) For this lesson we've used the Pens extension to track our Sprite's motion. This will leave a trail following the Sprite, giving visual feedback. The learning objectives are: (1) understand how to add extensions to Scratch, and (2) understand how changing the parameters of the motion controllers (distance and angle) effects the Sprite's movements.

Simple instructions:

Up Arrow: move forward

Down Arrow: reverses direction

Right Arrow: rotate Sprite clockwise

Left Arrow: rotate Sprite counter-clockwise

Your task:

- 1) Select a sprite but use a plain white background so the pen will show up clearly
- 2) Find the extensions tab and pick the Pen
- 3) Add the code blocks that you see on the right
- 4) Run the program several times, observe what happens
- 5) For the up arrow, change the number of steps, then play around with the Sprite
- 6) For the left and right arrows, change the number of degrees and see how the angles change
- 7) Try to figure out what happens when you change the other pen attributes (brightness, saturation, etc)

