

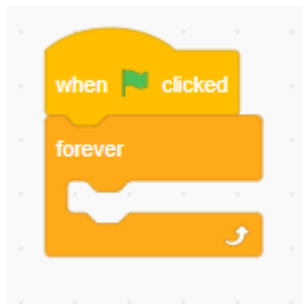
## Computing – Scratch

### Lesson 3

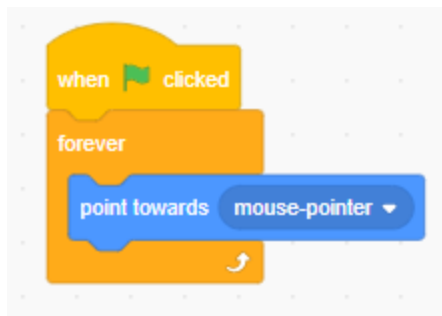
Today we are going to learn how to program the sprite to follow the mouse when it is in the stage area.

We want the sprite to start moving when we click the green arrow. See if you can find this block in the 'events' section. We also want it to follow the mouse all the time so will need a 'forever block'.

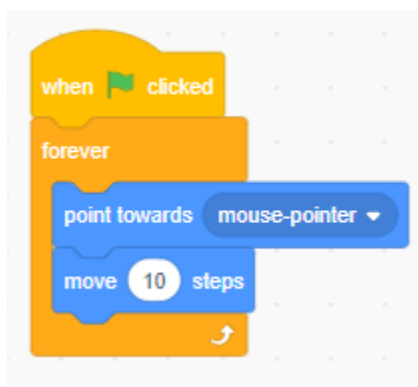
Your algorithm should currently look like this:



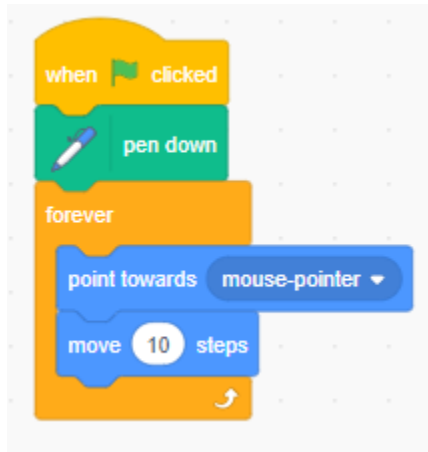
To make the sprite face the cursor all the time we will need to use a new block, 'face towards--'. We haven't used this block before; it can be found in the motion category. Make sure your script looks like the one below and then click the green flag. Move your cursor round in circles and watch the sprite spin.



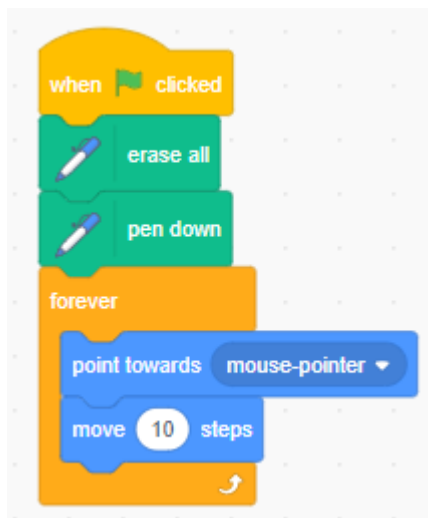
The sprite is spinning but we need to get it to move away from its starting point. We can do this in the same way as before by adding the 'move 10 steps' block. Just as before, add to your script then try your new algorithm to see if it works.



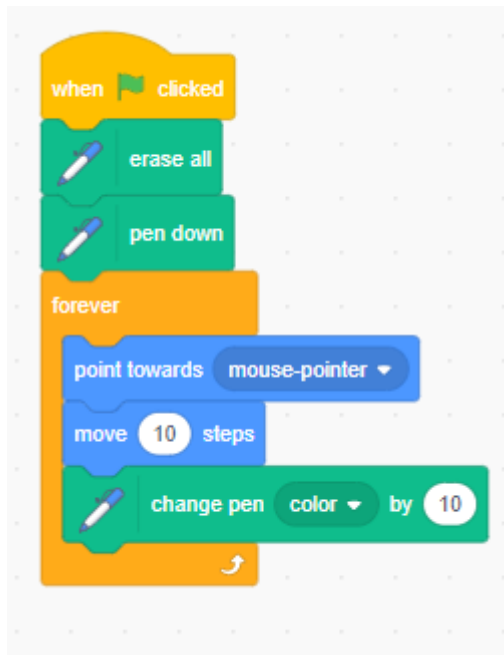
We can make the sprite leave a trail too. To do this you will need to use the pen tool. You will need to click on the blue symbol in the bottom left corner, then select the pen. You will need the block 'pen down' and place it just under the 'when clicked' block. This way the pen will be placed on the screen as soon as you press start, meaning no delay. Press the green flag to check it works.



If you checked your algorithm more than once, you will notice that the trail stays on the screen. The screen will eventually be full if we don't change our script. It is important that the 'clear all' block is placed before the 'pen down' block so that it clears the screen before it starts drawing again.



You can change the colour and thickness of the pen. You will need to place the block inside the 'forever' block' to ensure that it continues to change every 10 paces and not just the once.



Now try switching the 'forever' block for a 'repeat' block. What difference does this make?