Using the pen

The pen in Scratch enables a sprite to draw a line as it moves around the Stage.

Before you can use the Pen blocks, you need to add them to your Blocks Palette. Click the Add Extension button at the bottom of the Blocks Palette (shown above), and then choose to add the Pen blocks.

You’ll see the Pen blocks are added to the Blocks Palette, with a button to show them on the left too. The new blocks are:

- **erase all**: This clears all the drawing on the Stage, but doesn’t disturb the backdrop or any sprites.

- **stamp**: This block prints a copy of the sprite on the Stage, so when the sprite moves on, it will leave a picture of itself behind. It’s just a picture of the sprite, not a copy of the sprite that you can control. In Chapter 4, you’ll learn how to clone and duplicate sprites, so you can control the copies.

- **pen down**: This is like putting the pen down on a piece of paper. After you use this, your sprite leaves a line wherever it goes.

- **pen up**: This block stops your sprite from drawing as it moves. Sprites start with the pen up, so they won’t leave a line unless you put the pen down. If you have been using the pen, remember to lift the pen up before moving a sprite if you don’t want it to leave a line behind it. For example, you might want to use this block before moving a sprite to its starting position in a project, in case the pen is still down from the last time the project ran.

When you come to add multiple sprites in your projects later, each sprite will have its own pen and its own settings for the pen color and size, and for whether the pen is up or down.

You can stamp a sprite on the Stage even when that sprite is hidden.

If you’re using the pen in your program, it’s a good idea to start with the “erase all” block so you always start with a clean Stage.