Drawing lines

Programming – Events and actions in programs

Lesson 3: Drawing lines

To adapt a program to a new context

- I can use a programming extension
- I can consider the real world when making design choices
- I can choose blocks to set up my program

Describe this project

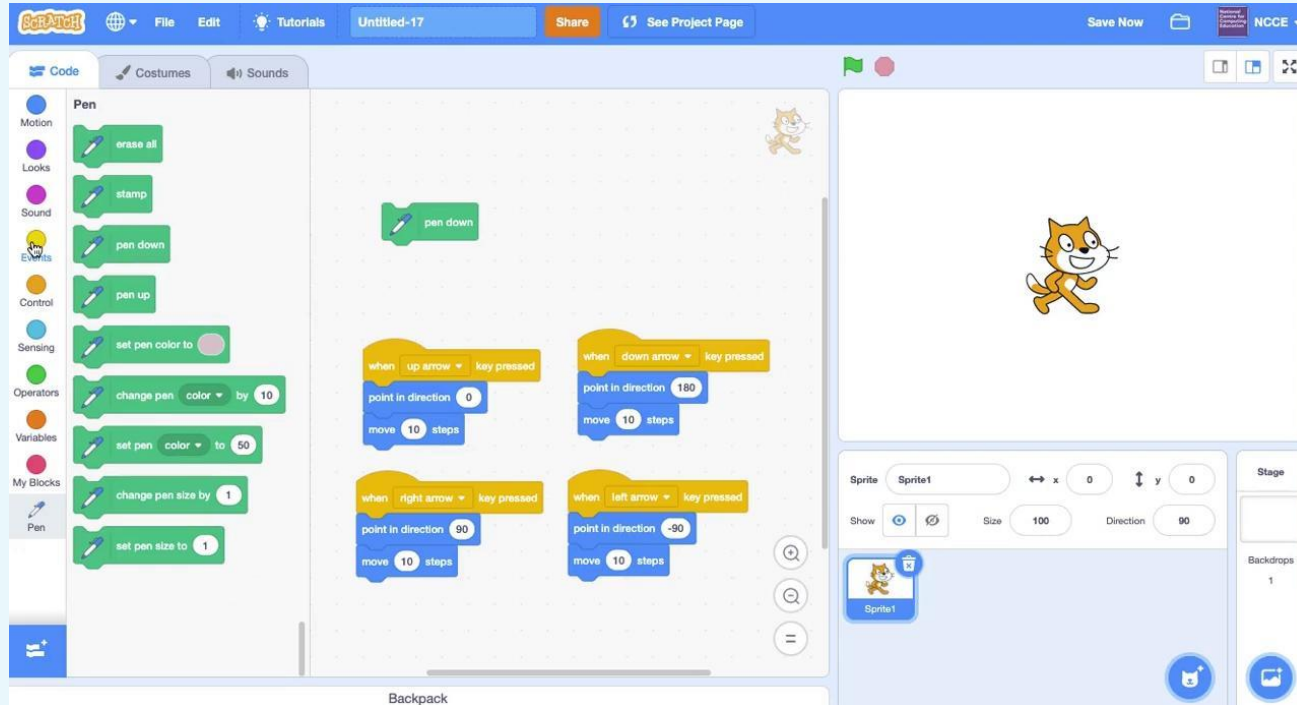In as much detail as you can, describe what happens in this Scratch project.
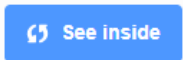
ncce.io/pg3b-3-a0-ca

Think about:

- The sprite
- The events
- The actions

Think carefully and write your description.

Adding Scratch extension blocks
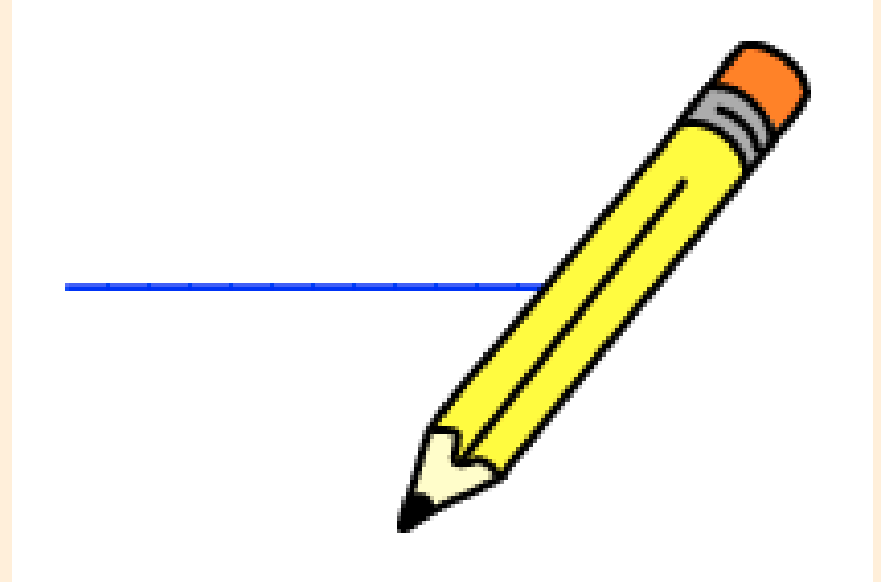
Create your own drawing program

1. Open up scratch online by going to https://scratch.mit.edu
2. Choose the **Pencil** sprite
3. Move it in four directions (look at the example program on slide 1 to help you with this – click on the [✄ See inside] button in the top right hand corner)
4. Go to the **Pen** extension blocks (click on [⊞⁺] to add the extension) and

pen down

Note: pen down enables you to draw lines. **pen up** stops the sprite drawing. 5

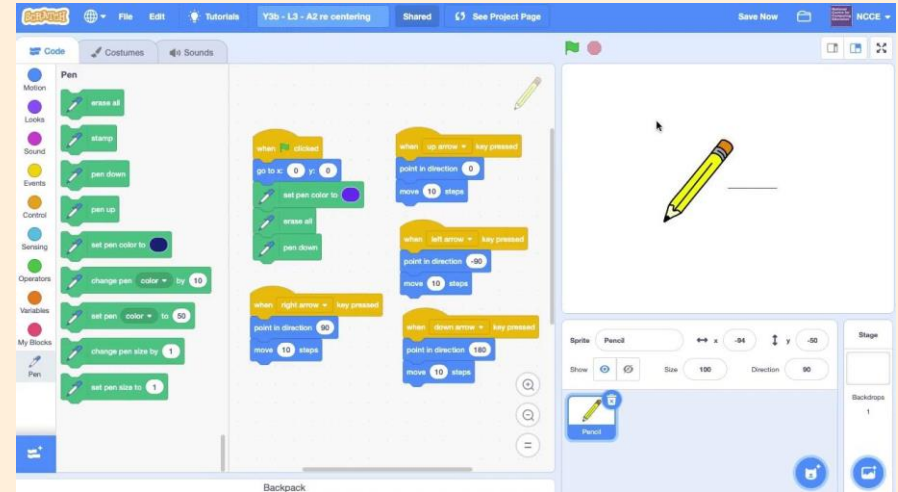# How could you improve the appearance of your project?

Can you make the pencil draw from the tip?

Changing the centre of a sprite

1. Click on the **Costumes** tab
2. Click and drag a box to select the whole sprite
3. Move the sprite so that the point of the pencil is on the cross
4. Run your project again

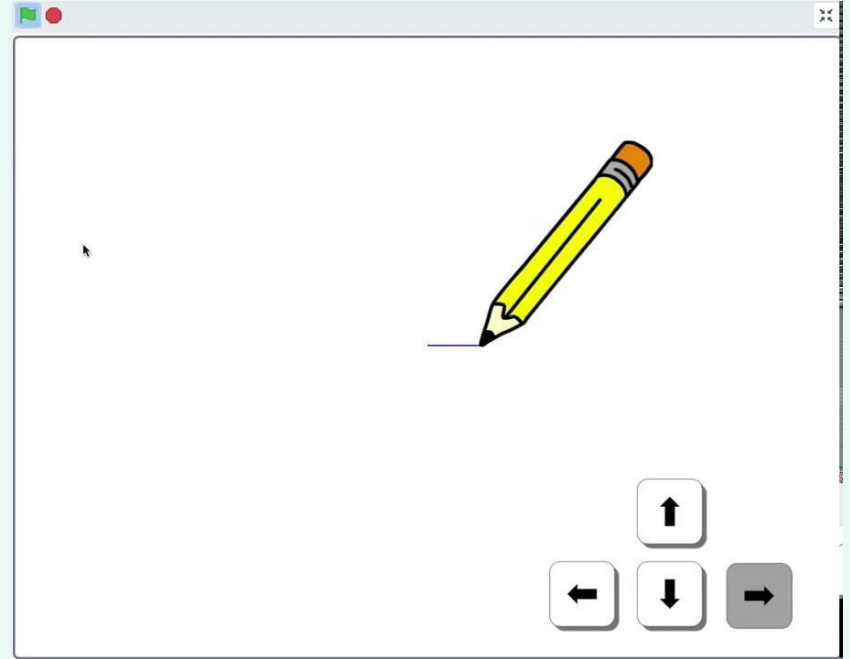Can you recentre the sprite in your project?

Setting up a project

Your project should start in the same way every time it is run.

Blocks can be added to a project to make sure this happens.

What happens when the green flag is clicked in this project?
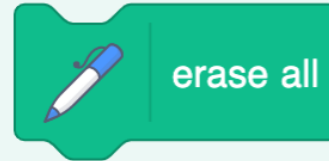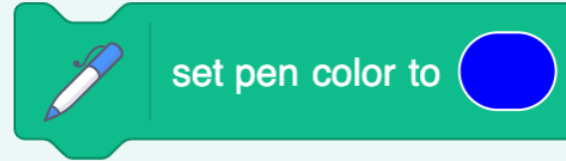
Use your worksheet to make notes.

Planning the setup of your project

Use your worksheet to help include setup in your project.
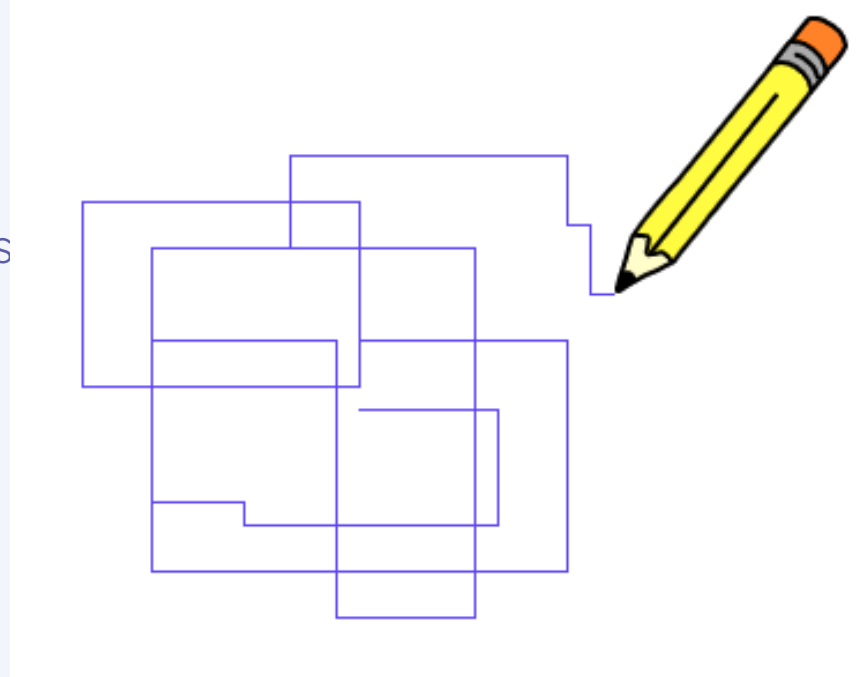
These blocks might be useful.

Remember to include an **Events** block.

Why is setup important?

Think and share.

Make some notes on your thoughts

How confident are you? (1–3)

- I can use a Scratch extension

- I can consider the real world when making design choices

- I can choose blocks to set up my program

3 – Very confident

2 – Unsure

1 – Not confident

Next lesson

In this lesson, you...

Learned how to draw lines with a sprite using an extension block, recentred a sprite to improve the appearance of your project, and learned how to set up your project so that it starts in the same way each time it is run

Next lesson, you will...

Create new effects with your pencil, and design your own drawing program