# Computing Programming

SCRATCH

We will be learning about sequencing in programming using scratch.
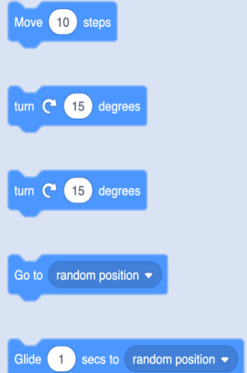
## The blocks you will use in this unit

### Motion Blocks

Move 10 steps

turn C 15 degrees

turn C 15 degrees

Go to random position ▼

Glide 1 secs to random position ▼

### Looks and sound blocks

next costume

next backdrop

play sound C piano ▼ until done

start sound C piano ▼

### Event blocks

when ⚑ clicked

when this sprite clicked

when space ▼ key pressed

Event blocks tell the sprites when to follow their code.

### Events in Scratch

when ⚑ clicked

when this sprite clicked

when b ▼ key pressed
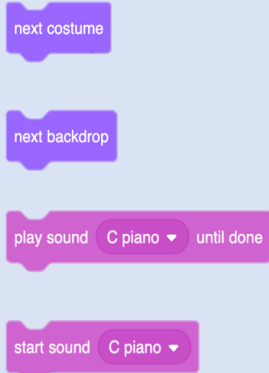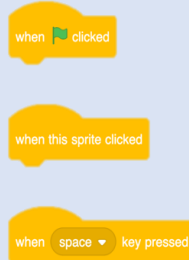
## Project: Create a Piano

notes

chords
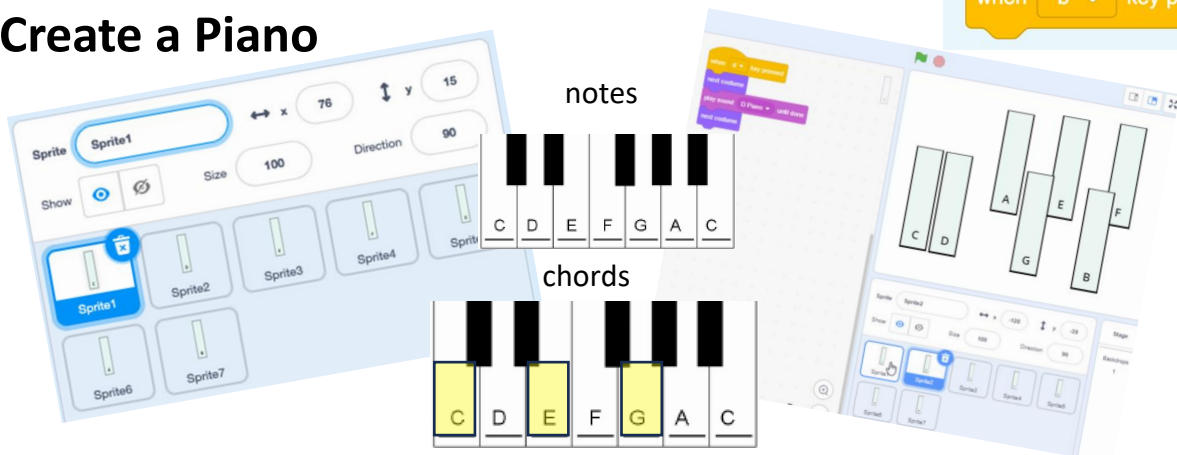
| Key Vocabulary | |
|---|---|
| **Program** | A list of instructions we give to a computer. It is a special type of <u>algorithm</u> that a computer can understand. |
| Sprite | A 2D image or animated image that plays a specific role, within a larger image environment. |
| **Sequence** | A series of events that must be performed in order to achieve a task. |
| **Bug** | A mistake or error in an algorithm or computer program. |
| **Debug** | When we find the bugs in a program and correct them. |
| Algorithm | A sequence of instructions that are followed to complete a task. |
| **Attributes** | Colour, costume and sounds that belong to a sprite. |
| **Code** | A language that a computer can understand. |
| **Backdrop** | A backdrop is an image that can be shown on the Stage |
| **Block-Coding** | When we use coding instruction "blocks" to create a program. In Scratch these may be motion blocks, sound blocks or event blocks |
| **Events** | Event blocks tell the sprites when to follow their code or code sequence. |
| **Notes** | A single sound on a tuned instrument. |
| **Chords** | A combination of notes create a chord. Ie F A C   G B D    C E G |

**Programming blocks**

**Programming area**

**Stage with sprite**

**SPRITES**

LOG ONTO: SCRATCH

https://scratch.mit.edu/
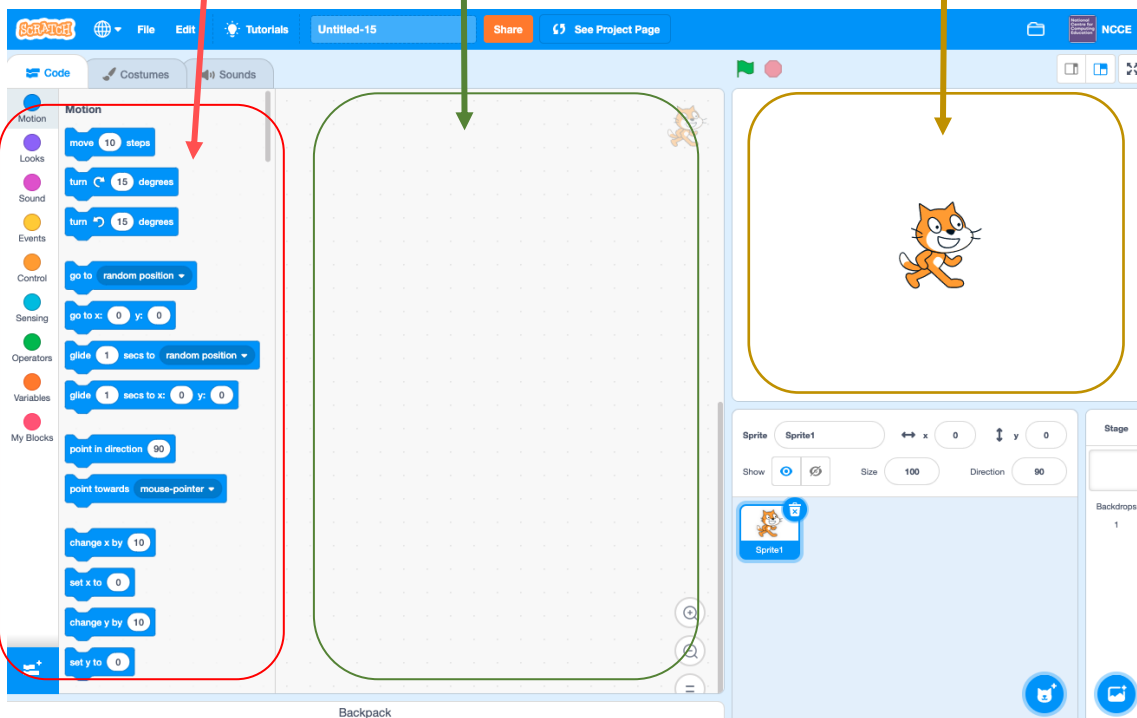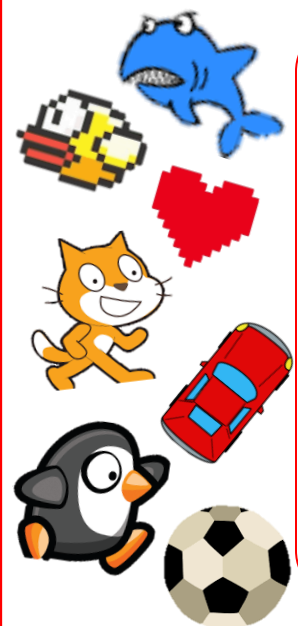
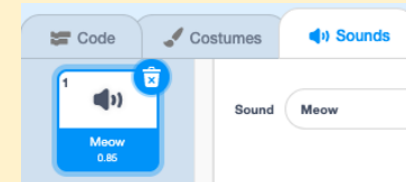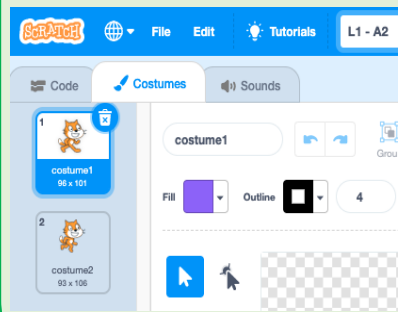## Attributes

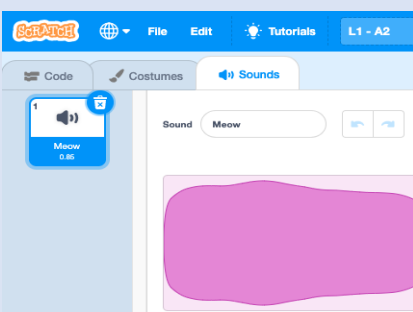These show how a sprite will look, (costume) sound and act (code).

## COSTUME
Changes how your sprite looks.

## SOUNDS
Sounds you can add to your sprite.

## BACKDROP

1.) Click on 'Stage' on the bottom right-hand corner of the screen

2.) Click on the icon

3.) Choose your new background