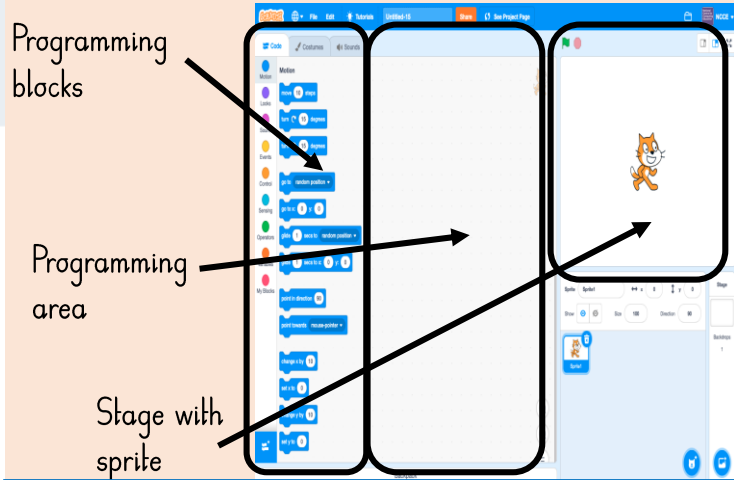




Year 4 – Programming B: Repetition in Games

- Motion
- Looks
- Sound
- Events
- Control
- Sensing
- Operators
- Variables
- My Blocks



It is always important to plan your algorithm and what you would like the outcome to be **before** you start to code your program. Writing down your algorithm helps you to spot and debug errors later on too.

Sentence Stems:

- Rotate ___ degrees clockwise
- Rotate ___ degrees anti-clockwise
- Go to a random place on the screen
- Start playing the sound ___
- When you start the program
- Make it in/visible
- ...and wait for ___ seconds
- Do this ___ times
- Repeatedly

A 'count-controlled loop' block will repeat the command a certain amount of times, depending on the input.

```
repeat 4
  move 50 steps
  turn 90 degrees
```

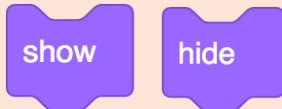
An 'infinite loop' block can be used to repeat commands over and over again, without an end point.

```
repeat 2
  point in direction 90
  wait 1 seconds
  point in direction -90
  wait 1 seconds
```

```
when clicked
  forever
    hide
    wait 1 seconds
    go to random position
    show
    wait 1.5 seconds
```

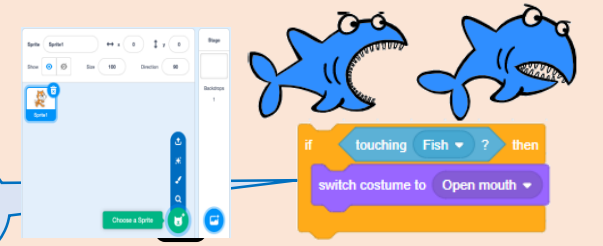
= repeat 4 [fd 100 rt 90]

Use the **show** and **hide** commands to decide when a **sprite** can be seen or not.

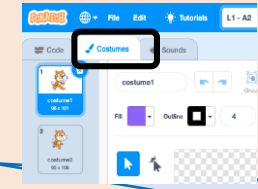


Change **sprite's costumes**.

This will make the shark open it's mouth when it 'eats' a fish.



```
if Score > 50 then
  switch backdrop to Win
else
  switch backdrop to Lose
```



Change the **backgrounds** based on **variables**.

This will change the background based on the score, to winning or losing.

Add **sound** to your **sprites** and decide when it plays

Find a sound that is right for you!

