

# **PODAR INTERNATIONAL SCHOOL ,NANDED**

## **CHAPTER: MOVING AHEAD WITH SCRATCH 2.0**

### **Random Movements:**

- Random numbers are numbers generated such that its outcome is unpredictable.
- They are used in games to move/show an object to a new unpredictable location.
- It adds surprise element to a game.



It will select any random number from 1 to 10

### **Sensing the Keys**

- Used to respond to a key pressed on the keyboard



It will sense spacebar key pressed or not. And will perform appropriate function.

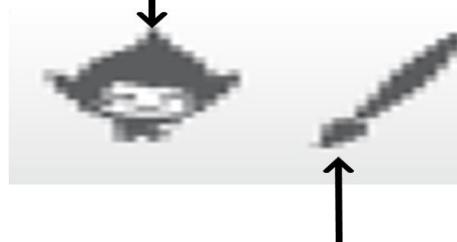
The following script block can be used to change the color of the sprite each time the up arrow/ down arrow key is pressed



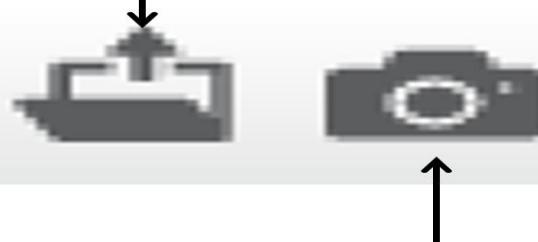
\*How to create a new sprite

Click on any one of the options to create a sprite.

Choose sprite  
from library



Upload sprite  
from file

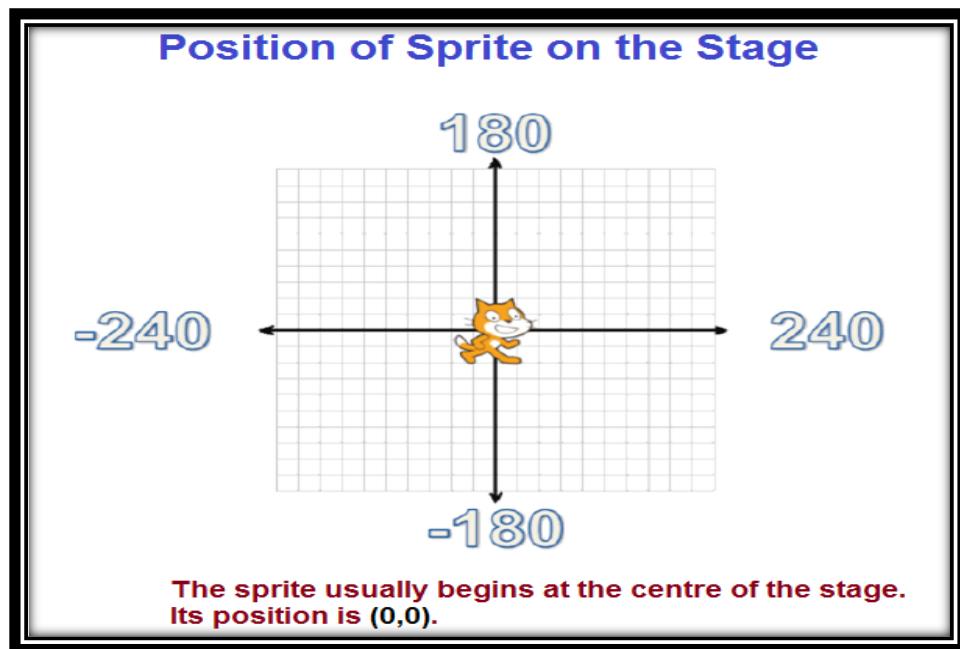


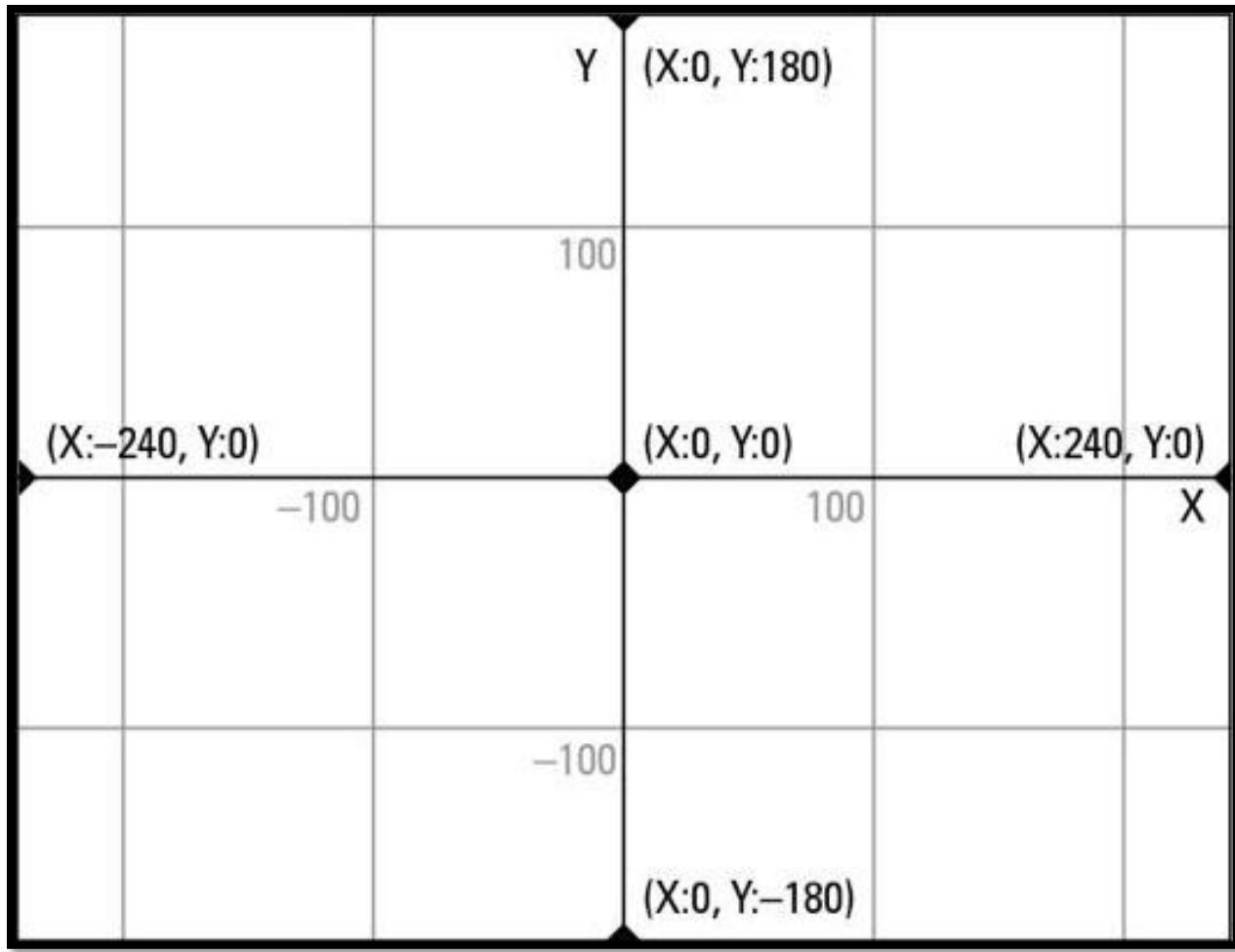
Paint new  
sprite

New sprite  
from camera

#### \*Stage Interface

Ranges from -240 to 240 horizontally [X-AXIS] AND -180 TO 180 VERTICALLY [Y-AXIS]





**IMPORTANT POINT:**

1. SENSING KEYS ARE USED TO RESPOND TO KEY PRESSED ON KEYBOARD
2. RANDOM MOVEMENTS ARE USED TO GENERATE RANDOM VALUES BETWEEN THE UPPER AND LOWER LIMIT
3. The 'if block' is used to test a condition and execute the script inside it if the condition is true.



Motion	Looks	Sound	Pen
move 10 steps	say Hello! for 2 secs	play sound meow ▾	clear
turn ↗ 15 degrees	say Hello!	play sound meow ▾ until done	stamp
turn ↙ 15 degrees	think Hmm... for 2 secs	stop all sounds	pen down
point in direction 90°	think Hmm...	play drum 1▼ for 0.25 beats	pen up
point towards ▾	show	rest for 0.25 beats	set pen color to □
go to x: 0 y: 0	hide	play note 60▼ for 0.5 beats	change pen color by 10
go to mouse-pointer ▾	switch costume to costume2 ▾	set instrument to 1▼	set pen color to 0
glide 1 secs to x: 0 y: 0	next costume	change volume by -10	change pen shade by 10
change x by 10	switch backdrop to backdrop1 ▾	set volume to 100 %	set pen shade to 50
set x to 0	change color ▾ effect by 25	volume	change pen size by 1
change y by 10	set color ▾ effect to 0	change tempo by 20	set pen size to 1
set y to 0	clear graphic effects	set tempo to 60 bpm	
if on edge, bounce	change size by 10	tempo	
set rotation style left-right ▾	set size to 100 %		
x position	go to front		
y position	go back 1 layers		
direction	costume #		
	backdrop name		
	size		

