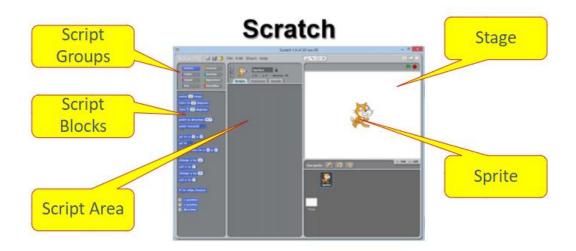
## Computing – Scratch

## Lesson 1

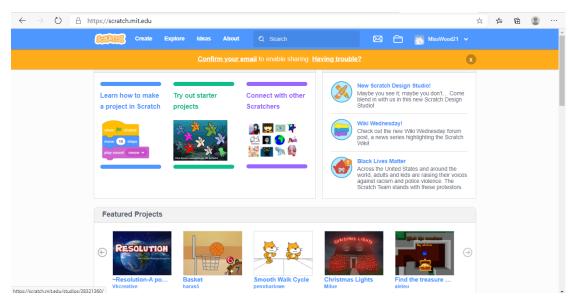
You will hear vocabulary in the next few lessons that are specific to this unit or have a different meaning in this context. The image below should help make it clear what is being referred to. You may need to make reference to this more than once throughout the unit so if you can print it and put it somewhere you can see it, do.



## You will need to visit the following website and sign up:

## https://scratch.mit.edu

To do this you will need to create a username and password. When asked or an email address, please use a parent's email address with their permission. Once you have successfully created an account and signed in, your screen should look like this:



Click 'Learn How to Make a Project in Scratch' and watch the short video. This will help jog your memory of the basics. Then watch 'Add a Backdrop' and 'Add a Sprite' if you cannot remember how to do this. The links to these videos will appear at the end of the first video clip. Have a go at creating a sprite and choosing a background.

Here I have created too many sprites.

StrAT	🕕 🕂 File	Edit 🔆 Tutorial	<b>\$5</b> See Project Page		Save Now 📋 🚺 MissWood21 🗸
Co	de 🦪 Costumes	() Sounds		<b>N</b> •	
Motion	Motion				
Looks	move 10 steps				
Sound	turn C* 15 degrees				
Events	tum 🏷 15 degrees				
Control	go to random position				
Sensing	go to x: -126 y: 76				
Operators					<b>N.</b>
Variables		ndom position -			
	glide 1 secs to x:	-126 y: 76			Stage
My Blocks	point in direction 90			Sprite Sprite1	↔ x (-126) \$ y 76
	point towards mouse-p	ointer 👻		Show O Ø Size	100 Direction 90
=				a a a 😑 🛛 👰 🖌 👘	Backdrops
	change x by (10)			Sprite1 Amon	

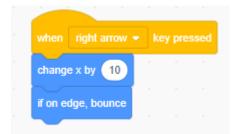
To delete one I will have to click the small bin next to the picture of my sprite.

N 🛛	
Sprite Sprite1 ↔ x -126 ‡ y 76   Strate Ø Ø Size 100 Direction 90	Stage
Sprint Amon	Backdrops

Now copy the code below to get your sprite to move. The blocks are colour coded so if you don't know the group the block belongs to, look for the same coloured circle on the left hand side.

when	up arrow 💌 key pressed
chang	e y by 10
when	down arrow 👻 key pressed
chang	e y by -10
when	right arrow 👻 key pressed
chang	exby 10
when	left arrow 👻 key pressed
chang	e x by -10

You'll notice that your sprite will disappear off the edge. To stop this happening you will need to add the following block to each of your algorithms.



Although this stops the sprite disappearing off of the screen it turns them upside down. To overcome this you need to click in the direction box followed by the two small arrows.

e	🗧 🔣 MissWood21 🗸	
	Baskdops	

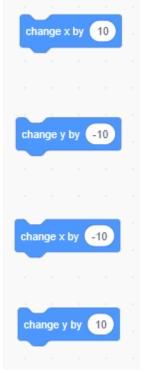
To make your sprite move faster you can increase the amount of steps he moves by.



Now make sure that each algorithm stops the sprite disappearing from the stage.

Let's see how much you can remember!

- 1. Create a new sprite.
- 2. Make it move up, down, left and right. This must happen using different keys to the first sprite.
- 3. Now make the sprite move at a different speed to the first sprite.
- 4. Which of these pieces of code will make the sprite move left?



5. How can you stop a sprite disappearing off the edge of the stage?