## **Knowledge Organiser: Scratch**

What is Scratch?				Catego	ategory		Notes
Summary				Moti	on M	oves sprites, ch	anges angles and position
Scratch is a visual programming language, designed for people who have never done any programming before. Its a very good tool to learn the basics of coding.				Look	Looks Controls the		als of the sprite
With Scratch, you can program your own interactive games, and animations. Scratch				Sou	nd Pl	ays audio files a	and effects
helps you to learn coding in a visual colour coded way and see how the blocks of col-				Events Event handlers			
oured code fit together to make a working program. It also lets you learn about more complicated coding concepts such as iteration and selection in an accessible way.			Con	Control Conditionals and		loops etc.	
Scratch is an online coding program— <u>www.scratch.mit.edu</u> used widely in the uk and usa to learn how to code.				Cate	gory		Notes
Scratch User Interface				ising	Sprites can int	eract with the surrounding	
<mark>BERTER (</mark> ∰ ≠ File Edit :∯ Tutonals Join Scratch Sign in			Оре	Operators Mathematical of		operators, comparisons	
Code Costumes Costumes Sunds			Variables Variable and Li		Variable and L	ist usage and assignmen	
Motion Motion					Blocks	cks Custom procedures	
Looks move 10 steps			434	BERATER		File Edit 🔆 Tu	The table above shows the
Sound Lum *) 15 degrees				🛫 Code 📝 Costumes 🌒 Sound		stumes 🌒 🌒 Sounds	categories of the programming <b>blocks:</b>
Control go to random position -	Tutorials			Mo	otion		
ensing go to x: 0 y: 0	Tutorials Shrink Close			Motion	ove 10 ste	eps	When creating sprites and backgrounds, users can dra
perators glide 1 secs to random position -				Looks	m (° 15	degrees	their own <b>sprite</b> manually, choose a Sprite from a libra
glide 1 secs to x: 0 y: 0			Stane	Sound			or upload an existing image
point in direction 90		Sprite Sprite1	↔ x 0 I y 0 0 000000000000000000000000000	Events	m <sup>•</sup> 7 15	degrees	There are <b>three tabs</b> to cre
point towards mouse-pointer -			Backdrops	Control	to random	position 👻	your program on the coding
change x by 10	(=)	Sorted					area —Code, Costumes and Sounds

Operators

Variables

My Blocks

1 secs to random position -

1) secs to x: 0

The example here is coding

the **motion** of the sprite

The Scratch interface has three main sections: a stage area, block palette, and a coding area to place and arrange the blocks into runnable scripts. Users may also create their own code blocks and they will appear in "My Blocks".

With a sprite selected at the bottom of the staging area, blocks of commands can be applied to it by dragging them from the block palette into the coding area. The Costumes tab allows users to change the look of the sprite in order to create various effects, including animation. The Sounds tab allows attaching sounds and music to a sprite.